

The NATION'S SCHOOLS

DEVOTED TO THE APPLICATION OF RESEARCH TO
THE BUILDING, EQUIPMENT AND ADMINISTRATION OF SCHOOLS

VOLUME VIII

NOVEMBER, 1931

NUMBER 5

The Challenge and Promise of the New Education

*This readable survey shows how and by whom the
new education was developed and traces the move-
ments that have culminated in the modern school*

By FLETCHER HARPER SWIFT, Professor of Education, University of California

IT WOULD probably be difficult to find any generation in the last five hundred years that has not been thoroughly convinced that it was passing through the greatest transition in scientific, commercial, intellectual and social thought and practices that the world had yet seen.

This undoubtedly was the conception of the foremost thinkers of the thirteenth century. It was the firm conviction of those great apostles of the fourteenth, fifteenth and sixteenth centuries who led the movement we have become accustomed to call the Renaissance. Those of us who are living in the present era are equally convinced that ours is, of all ages of the world, the most progressive, as well as the most transitional. But whatever evidence we may be able to present to support such a conviction, anyone at all familiar with the history of human thought knows that to the eighteenth century belongs the glory of having popularized the political and social doctrines that have completely transformed man's social and political relationships and his attitude toward these relationships, as they affect himself and mankind.

The eighteenth century opened with the doctrine of the divine right of kings, all but universally accepted in practice. Before the century had closed, Jean Jacques Rousseau had undermined the very foundations of this doctrine and in its place had

established the doctrine of man's inalienable right to freedom, liberty, equality and the pursuit of happiness. It was in the year 1762 that Rousseau, filled with compassion for the oppressed, starving, degraded and exploited masses of mankind, wrote his marvelous classic on government, "The Social Contract." It was in the same year that he wrote an equally marvelous and equally influential classic on education, "Emile." Just as "The Social Contract" was essentially an attack upon the doctrine of the divine right of kings, so "Emile" was an attack upon the doctrine of the divine right of parents and schoolmasters.

Rousseau and the New Gospel

According to the theory then prevailing, little children had no rights. To be sure the day was gone when parent or priest might lead a trembling little child to an altar and there make of him a living sacrifice, but it may well be questioned whether the horrors perpetrated upon childhood in the days of Rousseau and long after were not greater than those endured by children in savage tribes practicing human sacrifice. For among the savage tribes children were allowed to run free and unrestrained and only now and then, when special occasions arose, were they demanded as victims for gods who must be appeased. But if one looks into the school-

rooms of the eighteenth century, and indeed, into those of the nineteenth century, he finds childhood a period of repression, fear and torture.

Rousseau demanded for the oppressed child the same things that he demanded for the oppressed masses—freedom from their oppressors, the recognition that they have rights which are sacred and that those who ignore and violate these rights are culpable. Many before Rousseau had called upon parents and teachers to do away with the repression of childhood. The great Comenius turning to the world of sub-human nature had pointed out that if we wish to develop a beautiful and productive fruit tree, we do not weigh it down and crush it but we let it grow freely according to the principle of life embedded within its own nature.

But the voices of these earlier reformers were drowned out by the cries of little children and by the rod of the schoolmaster. It remained for Rousseau, whose great gift, like that of all geniuses in literature and art, was emotion, to utter the words that branded themselves on the minds of his generation and generations to come. From the day that "The Social Contract" was published, tyrannical governments were doomed and from the day that "Emile" was published a new conception of childhood, a new doctrine of education and a new gospel were given an ever increasing place in the minds of thinking men and women. Little by little this doctrine and this gospel have made their way until now in every leading nation there is an ever increasing group of parents, teachers and social leaders who recognize that the only sound procedure in training and developing a child is that which is based upon a study of the child's own nature.

When Learning Was "Memorizing"

In times past little children were forced to spend almost all of their time in school memorizing facts which it was believed might some day prove useful. On this basis we were forced to learn the names of mountain ranges, rivers, capes, seas and the boundaries of states and countries, without the remotest idea of the significance of any of these things. "Name all the rivers that flow into the Atlantic Ocean; name all the capes you would pass in sailing from Alaska to the Horn; name all the exports and imports of the United States, of Brazil, of France"—these were the tasks we had assigned to us day after day. No one asked how many times in life we would need or even desire to know these things. No one ever asked whether these things were of interest or of use to a child or even to an adult.

When we marched from our seats to the recitation bench in the front of the room, we balanced our books on the tops of our heads and woe to the

child whose book slid off or who did not stand at the blackboard in a posture that suited his teacher. It was a crime against the most sacred laws of the schoolmaster to turn around in one's seat and as for whispering to your neighbor or helping him with some task that had been assigned to him, these were supreme acts of infamy and perversity.

Pioneer Educators and Their Achievements

What a change has come over schools and schoolmasters! To-day throughout the world teachers are thoroughly convinced that the most important basis for a useful and happy adult life is a happy childhood. It is more important that children should be happy in school than that they should acquire any amount of information. A school is essentially an institution to help children grow and this growth includes social, physical and spiritual as well as intellectual growth. Without freedom and happiness, growth is impossible, and growth in the case of a child as truly as in the case of a tree, plant or animal depends upon providing it with an environment that will supply the materials its nature craves.

We still accept the doctrine that the purpose of the school is to prepare children for life, but we interpret this to-day as meaning that preparation for life must come through actually living. The things that life demands of every one of us are initiative, independence of judgment and action and the ability to cooperate. These are the watchwords of the modern school. The children move freely about the classroom and the building. They assist one another in their tasks. They even make their own rules of conduct.

The function of the teacher has become that of an educational investigator and director. It is his task to find out what the children in this class he is teaching most need. It is his task to discover what each is capable of doing. In the schools of yesterday the teacher said: "These are the things every child in this grade must learn and now is the time to learn them." He had no basis for this declaration other than the fact that the things he declared must now be learned were in a textbook the author had compiled without ever raising the question whether these were things a child would ever need or desire to know and, if so, whether now was the time when he would learn them most easily and profitably.

The change in the schoolroom began when that great pioneer and saintly teacher, Johann Heinrich Pestalozzi, declared that love and respect must be the basis of authority and government in the school as in the home. Rousseau had cried: "Reading is the scourge of childhood," and Pestalozzi, inspired by Rousseau had all but excluded books from his

school and based his lessons upon objects taken from the world in which his children lived. Pestalozzi's work, while fundamental and enduring, was nevertheless far from being carefully thought out. It remained for that next great pioneer, Friedrich Froebel, the founder of the kindergarten, to attempt to organize a system of education upon the basis of the child's present needs, present interests and present capacities.

Froebel raised the same questions regarding every aspect of child life. The ordinary schoolmaster of his day insisted that little children must sit still and keep still in school. Froebel, after carefully studying the child, affirmed that children love motion, crave activity and are not disturbed by noise. He organized a series of games and activities that would assure the child freedom. But this was not all. Froebel saw that the child's social nature craves development fully as much as his physical nature and that this development can come only through a socialized school. He therefore set to work to organize his schools about activities that would call for cooperation. He saw that here again games and manual activities offered the easiest, quickest and most effective solution.

Turning his attention to the intellectual, the moral and the religious aspects of child life, he met the same situation, the same problems and his answer was the same. We must cease, he declared, trying to compel children to accept the literature, the standards, the motives and the ideals of adults. We must build up for them a body of literature, songs and a body of ideals suited to their own lives, their own interests and their own capacities. Here was made the great beginning of that new body of poetry, story, song and music which to-day is to be found wherever the child life standard is recognized.

Kindergarten Methods in the College

These conceptions of education and these principles of Rousseau, Pestalozzi and Froebel were first recognized and applied in the kindergarten, but like all sound principles and true conceptions, their influence could not long be restricted. Gradually they crept upward into the elementary school, then into the high school. Little by little they are making their way into our universities and colleges.

I well remember an address given many years ago at the University of Minnesota by President C. W. Eliot of Harvard. In the course of his address, President Eliot remarked, "The thing that our universities need is more of the kindergarten method." At these words a subdued ripple of laughter passed over the assembled faculty. Totally unfamiliar with President Eliot's attitude toward the kindergarten and with the vigorous efforts he

had made to extend to higher education the principles embodied in kindergarten practice, they interpreted what he intended as a serious remark, to be a humorous fling at certain university tendencies of which they disapproved.

It was his belief in applying to higher education the kindergarten principle of liberty, that made President Eliot the early champion of the elective system of studies in American universities. It was his belief in this and other kindergarten principles, that led him to challenge the traditional organization of the secondary school and to demand a reorganization, based upon the present needs, interests and capacities of children in the secondary school period.

Integrating School With Life

Perhaps no one has pointed out more effectively than John Dewey the great gap between the ethics and practices of the traditional school and the ethics and practices of life. Perhaps no one has done more to stimulate the demand that the schools should become in themselves social organizations governed in the same spirit and in accordance with the same principles as those that are recognized as basic in the best communities outside the school.

"Teach nothing," says the modern school, "merely because it is a fact. Teach only that which you can show answers a real need or a real interest in the child's life and falls within the range of his present capacity."

That this does not mean children should learn nothing except that of which they have immediate use is well brought out in a remark that Dr. Maria Montessori made to me many years ago in Rome. I called her attention to the fact that many persons would seriously question the advisability of children of four and five years of age learning to read. To this she replied: "I can see no harm in letting a child learn something he does not need at the present time but which will be of value to him in later years, provided he learns it with pleasure and without undue effort."

In Doctor Montessori's school, no child was required to learn to read, but all did learn sooner or later, and the learning was with pleasure and without undue effort. In these same schools children learned to write at a much younger age than in the ordinary schools and this again they learned with pleasure and without undue effort. To me the most remarkable thing about their handwriting, when compared with the handwriting of the children in other Italian schools, was that the lines were straight and even, whereas the handwriting of the children in the ordinary schools was, in the majority of cases, uneven and betrayed evidences of nervousness.

It is undoubtedly true that the psychology upon which Doctor Montessori bases most of her intellectual exercises is unsound and it is also undoubtedly true that the training she gives through her so-called didactic materials is unsound. Nevertheless, she has taught the school world of her own generation many lessons which if they were not new, had been altogether ignored or at best learned only in part. So far as I am aware she is the first educator to apply in a complete and absolutely unrestricted manner the doctrine that little children should not be forced, that the first lesson in any subject or in any part or aspect of a subject should be primarily for the sake of discovering whether or not the child has reached a stage of development in which he is capable of acquiring without undue effort the knowledge about to be imparted.

Education at Its Best

Take for example her method of teaching a child colors. The teacher shows the child two small spindles, wound with colors and says: "This is red and that is blue." She talks to the child a moment or two, hands him the spindles and says: "Give me the red." What does she do if the child now gives her the blue? She takes the two colors from the child and says nothing. She puts them away, knowing that either the child is color blind, which can be determined by a later examination, or that the child has not yet reached a stage of development which would warrant trying to teach him to distinguish between colors.

Some one will ask, "How far can this principle be applied?" Another will quickly add: "Its application would mean a complete revolution in educational practice." Undoubtedly it would. Nevertheless, to apply it would be to put in practice the most profound utterances of educational leaders from the days of Plato to the present time. For these leaders have been unanimous in their declaration that nothing learned under compulsion is ever really learned. This perhaps is an extreme statement and one that therefore might be successfully challenged. On the other hand, it may be said with little chance of refutation that whatever is learned because the learner desires the knowledge for pleasure or profit will be far more thoroughly learned and appreciated than something he has learned under compulsion.

One of the greatest teachers that America has produced, Dr. Frank Morton McMurry of Teachers College, Columbia University, said in a lecture a number of years ago: "In life we read for enjoyment or profit. In school we read to remember."

To the United States are coming to-day from many distant lands men whose purpose is to study industrial and commercial methods and policies.

No small degree of credit for the superior efficiency of American industrial and commercial methods is due to men who have discovered how to eliminate waste. This in the field of education and in child life is the function of the modern school. The teachers in the schools of yesterday wasted, because they ignored, when they did not actually repress and stifle, the child's greatest assets and most valuable potentialities. The child to whom God had given a voice for communicating with his fellows, hands to do, a heart for joy and love, and feet to leap and run, was in the eyes of a schoolmaster of yesterday, a good child when he had become, to quote again Doctor Montessori, "as silent as a mute and as motionless as a paralytic."

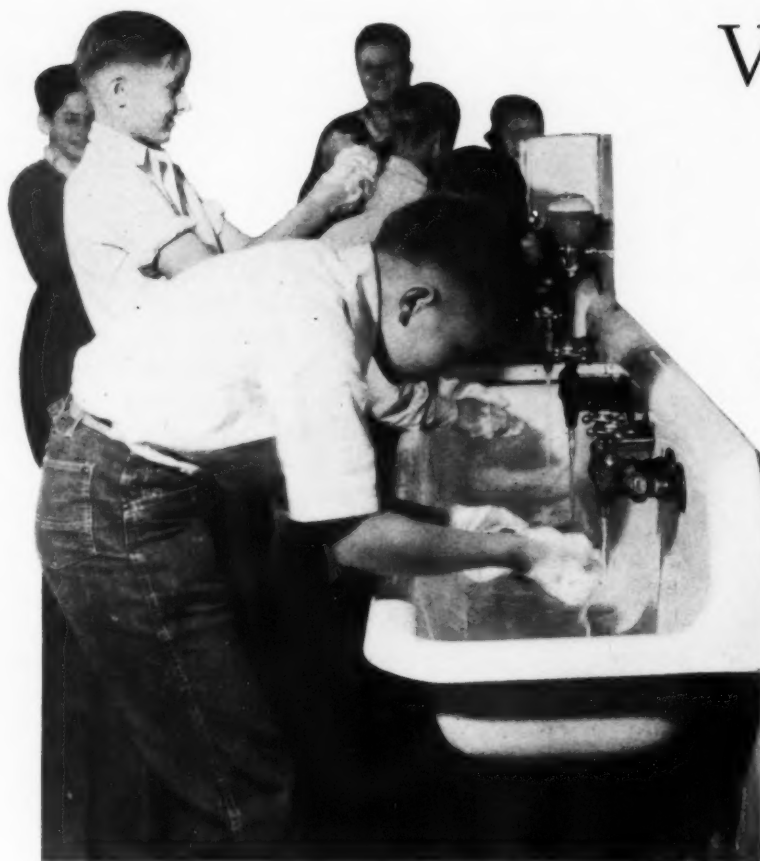
It was not only childhood that the teachers of yesterday wasted, they wasted themselves and their own powers. The strength and energy that ought to have been expended in discovering what children and youth most need as they pass from stage to stage of development and how they can best obtain these most needed things, were spent in trying to force upon them things which, for the most part, they would never need, would never desire and could never use. The modern school and the modern teacher recognize that there is no period in the life of a human being from infancy to adult years that has not its own peculiar needs, interests and capacities—physical, social, moral, religious, intellectual, esthetic. It is the purpose of the modern school and the modern teacher to discover what these needs, interests and capacities are and to assist the child to discover them for himself and to meet them, satisfy them and enjoy them.

"High Street" to Be Re-created at University of Chicago

The informal and hospitable atmosphere of "the High Street" of an old English university town is to be re-created at the University of Chicago, in the near future. To provide for the wants of students and other members of the university community, the university is building ten distinctive shops, done in the English Tudor manner.

The "old English shops" will comprise a drug store, stationery and book store, wearing apparel, beauty shop, barber shop, tailor and cleaner, food shop, shoe repair shop, laundry and restaurant. The University of Chicago real estate department is acting as agent in leasing these ten shops.

The shops are designed primarily to harmonize with the general English character of the university buildings. The façade is to be half timber and stucco above the windows, supported by brick piers and wooden posts.



Who Is to Blame for the School's Lack of Hand Washing Facilities?

The facts revealed in a recent survey show that too few pupils are being encouraged in cleanliness habits due to the school leaders' want of foresight in providing adequate equipment

By JULIA B. TAPPAN, Director of School Service, Cleanliness Institute, New York City

"**W**HAT nonsense!" scoffed the architect. "The plumbing is all right, generally speaking. In city schools, that is. Of course the little red rural schoolhouse is primitive. But wash rooms simply aren't kept in shape, and soap and towels are not handy. Then, too, children are not taught the hygienic and social reasons for frequent hand washing. No, you can't hold builders responsible if 26,000,000 school children aren't washing their hands as consistently as the laborers in any ordinarily well equipped factory. Teachers and maintenance departments are to blame."

The conversation that called forth the expression of this opinion and the reply made to it are beside the point here. The architect is quoted merely that his ideas—prevalent in some circles—may be weighed against facts revealed by a recent study of school hand washing which pictures teachers, in some instances at least, making heroic efforts to establish cleanliness practices in spite of serious lack of facilities. The study, which in-

cluded fifteen states, was made by Cleanliness Institute in 145 schools of various types with an enrollment of 124,000. Thus a typical cross section of all schools in the country is shown.

Among the schools visited were two junior high buildings, with enrollments of 875 and 675 pupils. Each of these buildings has only four lavatories, two in the girls' wash room and two in the boys'. Nevertheless, every hand is washed before luncheon. Thorough organization and a "staggered" lunch hour make it possible for each unit to wash approximately 400 hands satisfactorily.

Teachers have not arranged the procedure. They have acted far more wisely. They have inspired the boys and girls to do it themselves. An efficient colored ticket system was worked out and boys and girls were elected by their fellows to administer it. In two shifts pupils are dismissed and go to the wash rooms in line. Pupil monitors stand by each lavatory to see that soap is used; others distribute towels; still others later put a bit of colored cardboard into each pair of washed

hands. The color is changed daily. At the door of the lunchroom stands a businesslike pupil ticket taker. He admits only those with the right ticket for the day. As the children must take turns at the cafeteria counter, the washing causes no increase in the time required for serving luncheon. Since the pupils themselves planned the system and do the supervising there is no hint of objectionable compulsion. Rather it is a joint enterprise in which they take great pride.

A Resourceful Teacher

Down in the furnace room of another school included in the study, teacher and pupils spend an occasional noon hour melting scraps of soap brought from home by the children and bars contributed by the teacher. The liquid soap thus made is put into cream bottles which serve as soap dispensers. Two pails, one for clean water and the other for waste, and a dipper provide the "running" water desirable for sanitary hand washing. It is needless to add that the school's plumbing is virtually nonexistent, but once again the teamwork of teachers and pupils has overcome the handicaps and has made hand washing possible.

One of the schools visited is a handsome city structure built only two years ago. Although it was planned to accommodate nineteen classes, special rooms have been pressed into service until it now shelters twenty-seven. The basement toilet rooms have absolutely no hand washing facilities. The only places in the entire building where a child might attempt to wash his hands are at three faucets planned to provide drinking water for the school.

Do these examples prove that the architect quoted is entirely wrong? Do they prove that instruction, soap and towels are to be found in every school? Do they indicate that the one thing needed is more water equipment? By no means. They merely point out that this individual architect was overlooking his responsibilities. There are other oversights. The study clearly shows that only a small percentage of the nation's 26,000,000 school children are adequately practicing cleanliness rules in school. This is either because they cannot, or because they are not properly encouraged, or both. It appears that builders, administrators, teachers and school boards all have been "letting George do" the job of improving school hand washing equipment and practice, with the result that in many cases the job has not been done at all.

Statistics assembled indicate that the schools entirely without water are fewer in number than those entirely without soap and towels. While 11 per cent of the 145 schools visited had no soap and 13.8 per cent no drying equipment, only .7 per

cent, or one school, had no water at all for hand washing.

Nevertheless, the architect was wrong when he said that, generally speaking, the plumbing is "all right." For example, in but 44.1 per cent of the schools visited is warm water available to all the children. Sometimes, of course, the fault is with maintenance, but in many cases no way of heating and delivering warm water was ever included in the building plans. Obviously cold water, which is all that is to be had for general hand washing in more than half of the schools, is not adequate.

Often the equipment is wrong in other respects, even in the most modern buildings. It is generally conceded, for example, by all who know about health problems, that school children should wash under running water. Incidentally, the use of running water, with the right equipment, need not be a wasteful process. Filling the bowl is likely to be insanitary, since dirt inevitably accumulates in the washbasin and is seldom properly removed before the next child washes. Furthermore, it is a needless waste of time.

Yet 56.6 per cent of the schools observed have only selfclosing faucets, which must be held open by someone other than the person washing if a flow is to be maintained.

Facilities Are All Too Limited

Both warm and cold water are provided for general hand washing in 44.1 per cent of the schools studied. Soap is supplied in 57.2 per cent, and some form of drying equipment in 69.7 per cent. A lamentable lack of foresight and coordination becomes evident, however, when these figures are checked one against another. Only 31 per cent of the schools have soap, towels and water, all together. And often in the schools where all three essentials are provided, supplies are so limited that it would be utterly impossible for every child in school to wash his hands on the two occasions—after toilet and before eating—which authorities insist are required for health and decency.

The general situation, it must be evident, is not satisfactory and needs the careful consideration of all concerned. Yet it has encouraging aspects. It is regrettable that no more than 31 per cent of the schools provide the three essentials to hand washing. At the same time, even so small a number doubtless indicates progress. Cleanliness was not in the curriculum in the "readin', 'ritin', and 'rithmetic" days. Only in our modern era of health education would it be possible to find the junior high "ticket system" and the teacher helping her charges melt soap. As long as a few teachers have the vision and enthusiasm to see that cleanliness is practiced, no matter what the handicaps, the day

is not distant when hand washing will have its place on school programs.

The way a country school included in the study is solving its hand washing problem should prove an inspiration to leaders everywhere. Not a game is played in this school that does not besmudge hands. Work hours, too, are filled with chalk and erasers, ink that will spill and books that may be

a fire—is poured over the soap lathered hands of the child who is washing, while the pail catches the drip. The washer then passes on to Mary who has towels to dispense.

Such primitive procedure is less surprising in a bucolic setting than it would be in a large city school. But the public school teacher has ever been a pioneer. If in order to make certain of clean-handed children she must bring the old oaken

When better facilities are not available a cream bottle serves as a soap dispenser in schools where teachers insist upon the practice of cleanly habits.



dusty. There are overshoes to be tugged on and off, and coal and water to be carried for "teacher."

Indeed, getting hands grimy was so inevitable that leaving them so had been a matter of course—until the advent of the new teacher. She invested the rusty pump with a new dignity, devised make-shift equipment and instituted regular hand washing under running water in a building as innocent of plumbing as an Indian tepee.

Three children are named each week to preside over the daily ceremony. Small Sarah, proud to be the "soaper," holds an oil can filled with a solution made at the school from odds and ends of soap the children bring from home. She puts a little in the cupped hands of the other children who, one by one, file past Herman, the "pourer." Herman stands behind a pail on the floor. In his hand is a gallon measure with a funnel welded to the lip. From this faucet, water—warmed on top of the heating stove when the weather is cool enough for

bucket or its enameled successor and a portable washbasin into the schoolroom, she will. Her efforts cannot but add force to the demand for adequate water, soap and towel supplies in the schools.

The problem, however, is more frequently one of making limited facilities serve large numbers of children than it is a problem of no facilities at all. System, supervision and real interest on the part of teachers and administrators offer the solution. The architect was right to the extent that whether equipment is adequate or otherwise, a real problem is the school leaders' use of the equipment provided. And encouragement lies in the way in which the more progressive educators are recognizing this responsibility and discharging it.

"All of our schools which have cafeterias have washbasins right in the lunchroom with soap and towels adjacent," said one health supervisor. "Pupils must pass by these basins in order to get to

the 'lunch line' and in some instances, with the exception of the junior high school, there is a pupil monitor to see that pupils actually do wash before lunch. All soap and towels are purchased from the cafeteria supply money or from the proceeds of the cafeteria."

A senior high school with washing equipment similarly placed, stations an upper class girl at the entrance to the lunchroom. She admits pupils in groups of ten. They pass to the washbasin and scrub thoroughly. Another pupil supervisor stands at the lavatory to see that there are no delay and confusion.

To develop and test ideas about equipment, its arrangement and manner of use discovered by the field study, a "laboratory" was set up in Newton, Mass. School authorities there gave enthusiastic cooperation in the tests. In eight typical school buildings—buildings old and new, with children from all sorts of homes—various units of washing equipment contributed by twenty-one manufacturers were assembled and installed for experimental purposes.

Stop watch in hand, observers checked the time consumed in using the various sinks, basins, soaps, soap dispensers, faucets, towels and electric driers. Units of 100 children required from five to fifteen minutes to wash thoroughly. Yet even when the minimum is attained and the time for group hand washing is reduced to an average of three seconds

a child, it is sometimes difficult to find a place in crowded school programs for the procedure.

A few schools have not hesitated to take part of the hygiene period for hand washing. Since a child's health depends upon what he does, rather than what he knows, is it not reasonable to add to theory the actual practice of the hand washing phase of the health teaching? Other schools set aside five or ten minutes before dismissal for hand washing, under supervision. In this way, there is no shortening of the play or luncheon periods.

Time studies were only one part of the Newton experiments. Lack of space prevents a presentation here of all the observations made. It should be noted, however, that the greatest economy in both time and water was effected when children washed in groups under running water controlled by a central key in the hands of the teacher or the janitor. The key operator, furthermore, provided a supervision that is needed if hand washing is to be effectively done.

Another important factor, the study showed, is the location of the equipment. Soap should be within easy reach of the water equipment. Towels, however, should be to one side. The drying process should not interfere with the next child's washing. The wash rooms, if they are to be used regularly, should be conveniently placed in relation to classrooms, lunchrooms and toilet rooms. Mirrors,



Colored slips handed to a monitor at the door of the lunchroom signify that hands have been carefully washed.

Here a monitor supervises hand washing while another gives out colored slips that will admit pupils with clean hands to the lunchroom.



while highly desirable in the school wash room, should be hung on a wall away from the washing equipment, rather than over the basins as is so frequently the case. It was shown in the time tests at Newton that even a slight pause made by children to glance at their reflections appreciably increases the hand washing time of a large group.

Although the complexities of the school hand washing problem multiply, the earnest teacher and administrator cannot afford to be discouraged.

Clean hands have been a conscious goal in classrooms since first the teacher cast a frown upon grimy fists smudging arithmetic examples off slates. Arithmetic problems are no longer salivated out of existence. Even the most careless school child soon learns that, ideally speaking, his hands must not mar the white paper upon which he now does his sums.

There is need, however, for a more general understanding of the fact that clean hands bear a relationship to health, and that hands covered with visible grime may possibly be less dangerous to health than hands that, though to the eye clean,

may carry upon them germs of communicable disease.

The child with a cold may, politely enough, cough into his hand when he can't find his handkerchief. The hand looks clean. But the tiny droplets of nose and mouth secretions it catches may be as dangerous to health as the old salivary aid to slate erasing.

Statistics tabulated with the cooperation of official health agencies indicate that 92 per cent of all deaths from communicable diseases are caused by micro-organisms which enter or leave the human body through the mouth and nose. It may be assumed that the same gateways are used by a similarly high percentage of the organisms which cause the so-called "childhood diseases," even those that do not often result in death. School teachers know how likely children's hands are to find their way to children's faces. From time to time they have watched all sorts of ailments, from head colds to more virulent diseases, spread from child to child. Teachers and parents who give the matter thought believe that unwashed hands may have a large responsibility in distributing the microbes.



This makeshift yet effective hand washing procedure for a rural school was developed by a teacher who is a field student in health education.

And they agree with modern teaching that the washing of school children's hands upon two occasions—after toilet and before eating—is the least that must be required by those striving to establish good health habits. Health is not the only aspect of the matter, but it has an importance that doubtless motivates strongly every school administrator and teacher.

Toward adequate and healthful hand washing in schools, the architect has responsibilities that are definite. So also have the superintendent, the

teacher, the board member, the parent and even the average citizen. Any one of these alone could accomplish much. But when all those who should be interested in the well-being of children realize fully the health, good manners and character training values of regular hand washing practice by children during school hours, then at last the ubiquitous "George" will be eliminated and school hand washing will become—as it has already in schools that are leading the way—a regular part of the school curriculum throughout the entire country.

Complete hand washing equipment for a school as innocent of plumbing as an Indian tepee.



Translating the Rural Home of the Past Into To-Day's School

The cooperative experiences enjoyed by rural children of a former day must, in these days of small families, be supplied by the school, a responsibility that belongs wholly to the superintendent

By R. W. BARDWELL, Superintendent of Schools, Madison, Wis.

WHEN we use the term, "modern," in defining an educational program, we mean, I take it, a program that is attempting to meet present needs amidst the ever changing problem of how best to educate the children of the nation. As the conditions surrounding child life in America change, so do the needs. These needs the schools must meet, shift and rearrange in the order of their importance. This fact is no better illustrated than in the field of material equipment and facilities, which make up an increasingly important part of the school environment.

In the frontier or rural sections of even a quarter century ago, the home environment of the children was rich in educative materials. This fact played an important part in developing those skills and traits that have made the farmer boys leaders in their later life among the city dwellers. Varied and rich in educative value were the materials in the typical farm home of forty years ago.

There was the kitchen with all of its domestic activities; there were the wash house, the barn, the repair shop, the machinery shed, the animal pens, the attic and basement, the garden, the woods and fields—all typical farm places, the very naming of which brings up vivid memories and associations to the farm bred city man. All were rich in educative materials.

A Practical Education

Then there was the fact, which is even more important, that the necessity existed for growing children to know and to use these materials. The large family, the need for a great degree of self-sufficiency and independence, the need for cooperation in tasks by the small child even if it were at first only the collecting of eggs or driving the cows in from the pasture—all of these experiences and these materials gave opportunity for development.

At the same time that that child was receiving

this splendid educational opportunity in the farm home and community, what about the formal education in the school? In the little red schoolhouse on the crossroads, the barren and meager school curriculum did little more than give the children a taste of intellectual pursuits.

A Study in Contrasts

The contrast between the rural home of forty years ago and the city home of to-day, particularly the apartment house home, reveals a need the school must provide for if it is to meet the needs of to-day. The modern home life in its purely physical aspect is more barren of educative materials for a child than the little red schoolhouse of forty years ago. In the first place the number of children is so limited as to make it out of the question to develop those social traits that are the natural product of the "give and take" in a family of seven or eight children. There are no tasks for children, no cooperative duties in which all the members of the family may participate. The whole environment is meager, almost barren of child growth materials.

It is natural that the schools should come forward and make a valiant effort to compensate the child for the loss he has sustained in the home. If the old home was rich in experiences and materials for the child, and the old one-room school was meager, narrow and poverty-stricken in its program for the children, why not reverse the situation? Since the modern home is so barren, why not make the modern school as rich in materials and in experiences as was the home of yore?

The successful carrying out of the program of the "modern" school, therefore, is identified more and more each year with providing the facilities and supplies that are so essential in that program. In the old days when school procedures were largely directed toward the development of academic skills, when reading materials were con-

fined to a limited text and the entire curriculum was meager and restricted, the relationship of adequate supplies to the efficiency of instruction was not nearly so close as it is to-day.

The fact that the educational programs and policies are so closely linked with supply management makes it more necessary to-day than ever before that the administrative official responsible for the efficiency of the educational program be responsible also for the supply management which makes it possible for the educational activities to move forward according to the program.

In some cities at the present time the dual system of administration still exists. Under this system one administrative officer is responsible for the educational activities and another administrative official, coordinate in rank, is held responsible for the business or supply management. It is held by some that this type of organization is preferable because of the need that the business official check carefully on the curriculum which is instituted by the educational officer, evaluate it in terms of its educational results and determine whether it justifies the cost it entails. In other words, this business official is the one who would pass upon the program of the educational official.

If such a condition exists, the superintendent of schools is not the chief executive of the board of education. He is not even a coordinate official. The chief executive officer is the business official, and for the sake of truth, righteousness and good school administration, he should be designated as the superintendent of schools. The so-called superintendent of schools might well be designated as assistant in charge of instruction. This example is excellent evidence of the fact that the dual type of control is contrary to rather definite laws of human nature and that when a dual system is set up, it will usually break away from an even balance of coordinate authority.

Weaknesses of Divided Authority

In private undertakings, particularly as represented in industrial organization, a dual system of organization is unheard of. To conceive of a situation in which a superintendent of a plant would be coordinate with his purchasing agent and where the purchasing agent would proceed only upon order from a board of directors or upon his own decision that the purchase of certain supplies requested by the superintendent of the plant was justified by the factory conditions is beyond the imagination of men who are experienced in the field of industrial organization.

The schools are maintained by the public for one purpose—the education of the children. Because of the oneness of this purpose, there seems to be

no legitimate excuse for splitting into two parts the organization that is to accomplish that purpose. The board of education will select one executive officer in whom it places the responsibility for the accomplishment of this purpose and it will expect him not only to set up the educational program that is necessary for its consummation, but it will also expect him to delegate such portions of his responsibility as the efficient purchasing and delivering of supplies to the person or department that will most efficiently meet that responsibility.

The persons who are usually involved in the efficient supply management of a city school system are the superintendent of schools, who sets up the plan of management and delegates authority, the requisitioning officers, who make the requisitions for supplies and who receive the supplies upon final delivery, and the supervisor of purchases and accounts, who is responsible for businesslike procedure in the purchase, checking and delivering of supplies, and for the accounting.

The Superintendent a Coordinator

The superintendent in addition to being responsible to the board of education for the efficiency of the supply management is also responsible for all the factors preceding, following and contacting the business activities. The budget and the policies that the board of education adopts in respect to it may be considered first. How far will the school go in providing educational supplies? What facilities and activities justify their costs in their educational value to the children? These are matters the superintendent and his instructional staff will present to the board of education in order that the policy governing the decision may work out through the budget to the supplies' management.

The superintendent is also responsible for coordinating the work of all the persons involved. This includes all those who request or requisition supplies, the department that purchases and delivers and all who consume or use the supplies provided. He must see that the necessary contacts are provided for, that the responsibilities of every individual are known and recognized by that individual and that they are efficiently assumed and carried without break or lapse. Every person having anything to do with supplies—anywhere along the line from the requisition to use—should know definitely what he is expected to do, and his relation to the success of the entire scheme.

It is evident, therefore, that the whole staff of the school is involved in the effort to provide, through appropriate materials, the most effective educational environment. In many modern schools this cooperative effort is producing splendid results for the children.



How a Dream Transformed Education in This Tennessee Town

*Richard Hardy envisioned a school as useful as it
was beautiful—a child centered school. His dream
came true and stands today as his living memorial*

By ROBERT N. CHENAULT, Director, Richard Hardy Memorial School, Richard City, Tenn

THE Richard Hardy Memorial School, Richard City, Tenn., is one of the unique educational institutions of the South. It is probably the only school built and maintained as a memorial to soldiers of the World War. The building itself is a model of classical design with interior finishes of harmonious coloring and distinctive beauty, planned not only to provide for the boys and girls of Richard City the normal functions of a progressive elementary and junior high school but to serve as a community center.

The school was built in 1925-26 by the Dixie Portland Cement Company at a cost of \$243,000, exclusive of the furnishings and equipment. Charles E. Bearden, Chattanooga, Tenn., was the architect, and the late Dr. F. B. Dresslar, George Peabody College, was adviser. They worked out the practical form of Mr. Hardy's "ideal school." The completion of this building realized the dream

of the late Richard Hardy, president of the company, a dream developed early in his career as a school man in Michigan of a school as beautiful as it is useful. Such a school, Mr. Hardy felt, would make possible the development of the abilities of each individual child, thus enriching the entire community and assuring happier and more efficiently run homes. He sought and received the cooperation of his company in erecting such a building as a memorial to employees who had served in the World War. The impressive dedicatory services held April 28, 1926, were attended by distinguished guests from all over the country. The following dedication written by Mr. Hardy appeared in the invitation booklets issued by the company.

"Quietly, one by one they disappeared from their accustomed places; the training camps and the seas called them. Our honor roll lengthened

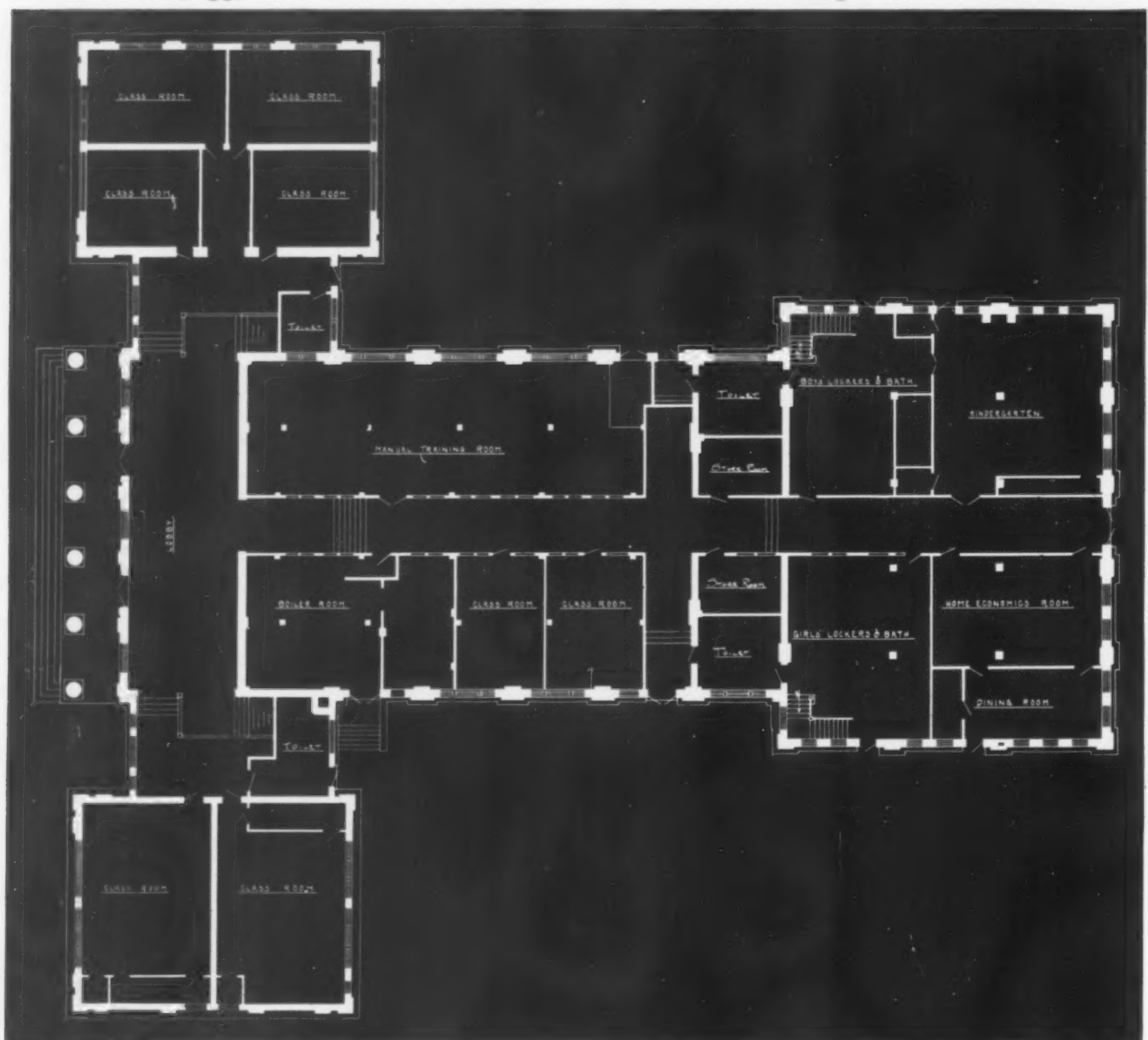
until seventy-two names were written there. They found their places in all the long battle lines of France. They were at Cantigny with the First Division; at Château-Thierry with the Marines; at Soissons; in the Champagne advance; at St. Mihiel; in the Argonne; with the North Sea Fleet; with the Thirtieth Division when the Hindenberg Line gave way. The war ended and their duty fulfilled, they came back as quietly as they went forth. Some bore the scars of conflict. They talked but little; they had marched with death. And some returned no more—they are one with the dreamless dust.

"This memorial school is our tribute to the service they rendered. With a profound sense of appreciation we dedicate it alike to our living and our dead."

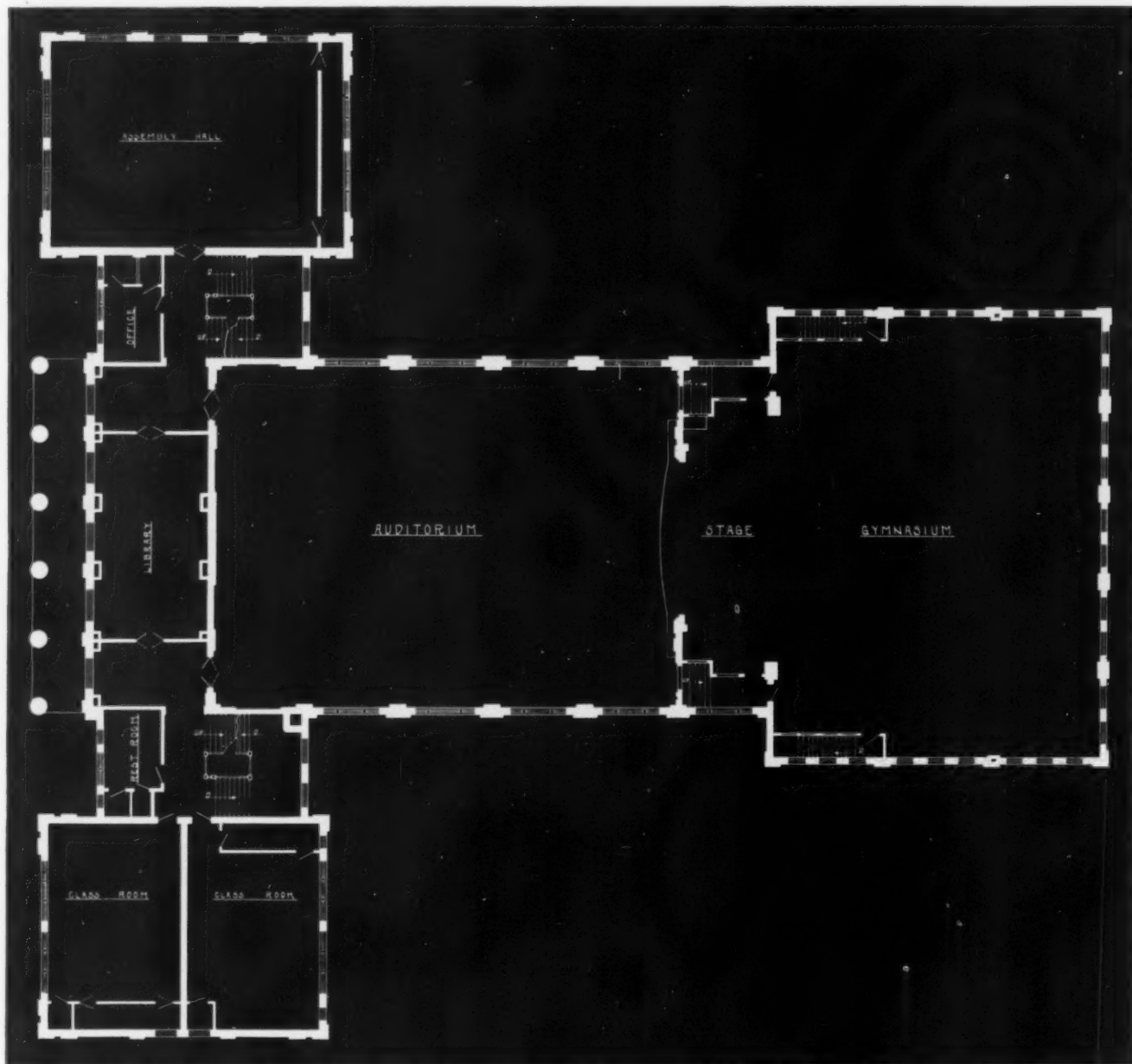
John R. McQuigg, the then national commander

of the American Legion, delivered the address at the Legion service, and H. A. Morgan, president, University of Tennessee, spoke at the general dedication. Since the death of Mr. Hardy in 1927, the name of the school has been changed from the Dixie Portland to the Richard Hardy Memorial School. It is appropriate that the name of the beloved founder, to whose vision and inspiration the school owes its existence, should also be perpetuated in this living memorial. The Pennsylvania-Dixie Cement Corporation, which in 1926 absorbed the Dixie Portland Company, continues to support the school and has made possible the development of a program that marks a forward step in education in the South.

The building is used by the kindergarten, the fourth and fifth grades and the junior high school, while the old building with six standard class-



In addition to the school facilities on the first floor is the memorial lobby, commemorating the employees of the company who served in the war.



The large auditorium and gymnasium occupy the greater part of the second floor. The library, also on this floor, is centrally located and easily accessible.

rooms is used by the first four grades. The principal classrooms are in the front wings of the building. On the first floor of the north wing are the fifth and sixth grade rooms, on the second floor, the teachers' rest room, the music room and the sewing laboratory of the home economics department. In the other wing are four rooms used for departmental work in English, for social science, for general science and for laboratory work in biology. There is also a science classroom. On the second floor is the study hall, with space for more than 150 pupils. Along the side of this room are steel shelves where nearly 2,000 reference books are kept. Tables and chairs give pupils easy access to these books during study periods. All of the rooms are equipped to assure an unusually

progressive and modern program of pupil activity.

The six sturdy Doric columns along the front entrance stand out impressively and indicate that in this building the architect made no compromise with classic lines. Immediately back of the main entrance is the memorial lobby. The floor of the lobby is of gray terrazzo. The walls have a cream base and misty blue and cream panels extend to the ceiling which is beamed in stucco. An iron stairway done in olive green with a bare mauve colored marble base leads up from each side. The woodwork is of solid oak. The whole impression made by the lobby is one of complete satisfaction as to color and line. The memorial spirit is emphasized by two large bronze tablets. One tablet contains the preamble of the constitution of the



The library, "the heart of the school," resembles an old English chapel, with its arched ceiling and walnut panels. In the home economics room pictured below the girls are taught to fit, cut and sew.



American Legion, the other the names of the seventy-two employees of the company who served in the war.

On the second floor, immediately above the lobby, is the library, "the heart of the school." This was Mr. Hardy's special gift. It resembles an old English chapel, with the ceiling beamed to carry the weight of the roof above it. The general effect, however, is one of beauty rather than of strength. The floor is of terrazzo, the shelves and woodwork are of a walnut finish and the tables and chairs are of solid walnut. Along the windows are walnut finished seats. It is difficult to describe this quiet, impressive and colorful room. There

main part of the building. It has a seating capacity of 625 persons. Deeply molded ceiling girders, panels of blending blue, gold and cream stucco and taupe velours window draperies make the room one of outstanding beauty. The stage is equipped for small theatrical performances. Back of the auditorium, on a level with the stage, is the 58 by 75-foot gymnasium. This arrangement makes possible the presentation of pageants and other entertainments that cannot ordinarily be given in a school auditorium. For ordinary purposes the auditorium is separated from the gymnasium by a heavy canvas curtain.

On the first floor directly under the auditorium



In the truly child centered kindergarten, active bodies are trained to carry out projects conceived by active minds.

are now about 4,200 books, carefully selected to meet the needs of all departments of the school and of the community. Forty magazines are taken. A trained librarian studies the needs of individual readers and helps the library to render the greatest educational service possible to the community as well as to the school.

The third floor is divided into rooms for Boy Scouts and Girl Scouts. One room houses the moving picture equipment which is the gift of John A. Miller, an official and large stockholder in the present company.

The auditorium is on the second floor, in the

is the heating plant. Two large boilers supply heat to both buildings. Rooms for janitors' storage, for the health director, for supplies and for manual training activities are on this floor. The shop is equipped with a jig saw, a lathe and other tools for woodworking as well as for other forms of industrial arts. It has a floor of wood blocks. Under the stage and projecting partly under the gymnasium are two locker rooms for girls and boys respectively. These rooms are equipped with shower baths and steel lockers and communicate with the gymnasium by means of separate stairways. Outside entrances make it possible for those who wish

to enter the gymnasium to do so without passing through the rest of the building.

In the extreme northwest corner of the first floor is the food laboratory of the home economics department. Adjoining the laboratory and to the right of this are a well equipped dining room, a service kitchen and a large food closet.

Every Room Is of Distinctive Beauty

Across the hall in the other corner is the kindergarten, a sunny, spacious homelike room with an outside entrance that leads to the specially equipped playground. One of the most attractive features of this room is a concrete fireplace, with a decorative frieze of familiar nursery figures. Wrought iron andirons add a homelike touch. The arrangement of the room and its furnishings, which include two large paintings of appropriate subjects, form a background of art, yet they do not detract from the needs the room was created to satisfy. It is indeed a child's world, where the child's first impressions are delightfully pleasant.

The entire building represents the latest advance in fireproof construction. There is nothing combustible except the doors, and a minimum of wood in the inside trim and the children's desks. The walls of the building are all of concrete hollow tile and the floors and roof are of reinforced concrete. The only wood floors are in the gymnasium and shop. The floors of the lobbies, the library, the stairways and the portico are of terrazzo.

The idea of beauty was not confined to the exterior of the building but was carried into every room. By means of varied color schemes and with careful attention given to lighting, it was possible to make every room distinctive. There are in all twenty-six different colors used in the interior. California stucco was used throughout. The beauty of the walls is much enhanced by a collection of twenty-four oil tinted reproductions of masterpieces of painting, selected by Mr. Hardy for the walls of the schoolrooms. This collection provides a splendid background for the encouragement of art and picture appreciation.

Grounds Are Artistically Landscaped

There is a spacious lawn in front, laid out by M. G. Currier, landscape gardener. Flower beds and shrubs are artistically arranged around the building. A large playground, equipped with apparatus, and four hard surface tennis courts are at the rear of the building.

Space permits a brief description of only those features of the school program that we feel are most distinctive and that indicate the school's contribution to the larger community life.

We have emphasized the gradual development of

a child centered school. Our first kindergarten class, enrolled in 1926, was in the fourth grade this year. Of particular significance then is the record on standard tests of the first four grades, since the activity program has had these five years of trial. That the "fundamentals" are not neglected, the accompanying table shows clearly enough.

It should be noted here that in the fifth grade, 56 per cent of the pupils have an I. Q. of less than 90. This high percentage does not exist in other

GRADE STANDINGS IN THE NEW STANFORD ACHIEVEMENT TESTS GIVEN APRIL, 1931

Grade	Paragraph Meaning	Word Meaning	Arithmetic	Total Scores
2	3.3*	3.4*	3.4*	3.3*
3	3.6*	4.2*	4.0*	3.7*
4	4.9*	4.6	5.0*	4.7*
5	4.9	5.5	5.0	4.9
6	6.8*	6.7*	6.6	6.2
7	8.2*	7.6	8.6*	7.6
8	9.2*	8.7*	10.*	9.0*
9	10.*	9.	10.*	9.2

*Indicates at or above grade standard.

grades, but the school as a whole is below the average probably in "mental ability" or "academic aptitude."

Our work in reading is especially important. At the dedication of the library in 1926 Mr. Hardy said: "The library means more to me than all else that has been built here, because from it will come inspiration, I hope, that will lead boys and girls out to do better things than they could have done had it not been for the library. We expect it to fill a large part in the life of these children." This prophecy is being fulfilled. During the past school year the total circulation of books was nearly 16,000, an average of 1,735 a month. This is notable when it is considered that the school enrollment above that of the kindergarten was only 350. Each room has its own library of books suited to the ages and interests of the children. More than 5,500 library books were read this year by the children in the first four grades. The children learn how to read, they develop a love for reading and they have access to an abundance of interesting inspiring books.

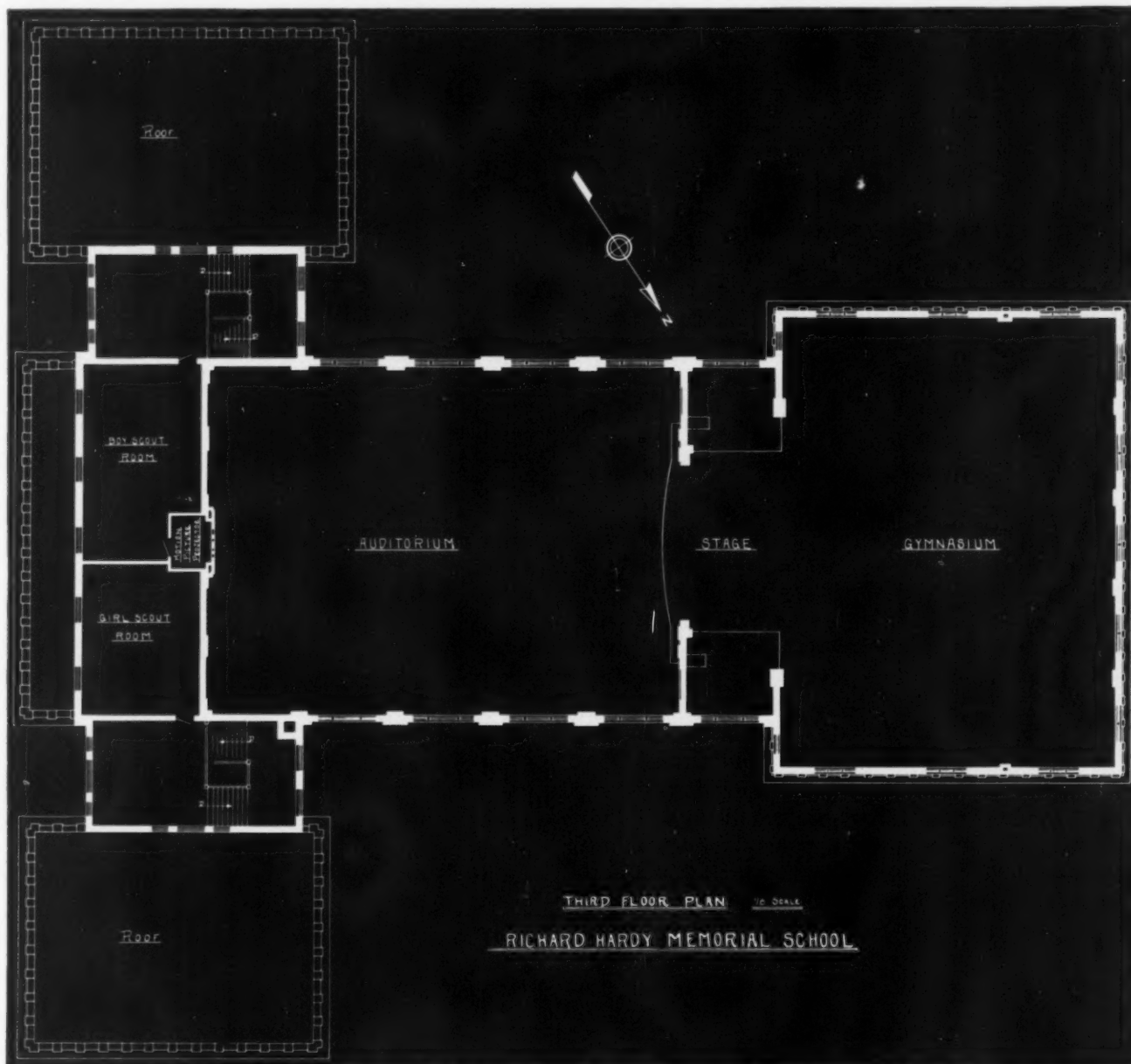
The library service of the school is receiving wide recognition. A member of the National Survey of Secondary Education visited the library this spring, the Richard Hardy Memorial School having been chosen as one of the two high schools in the South to be studied by the survey for their work in outstanding education.

The auditorium is the clearing house for all

school and community activities. Dramatizations, pageants, operettas, band and orchestra concerts and demonstrations, all outgrowths of the regular school work, make up the weekly assembly programs. These are always attended by an appreciative, interested group of parents and other adults. Lyceum courses, moving pictures and other

cational value to the community. It is gratifying to note the growth of the community appreciation and spirit.

Our program in health reaches beyond the school into the homes of the community. Physical education is directed by a man and woman for boys and girls in the junior high school, and by classroom



Rooms for Boy Scouts and Girl Scouts and the moving picture equipment are on the third floor.

recreational attractions are regular features. A community fair put on for the past three years with the cooperation of the Parent-Teacher Association has proved to be a vital factor in community improvement. The gymnasium makes an ideal exhibit hall. The annual exhibit of school work, in which every grade and department presents results of projects developed during the year, is a prominent feature of the commencement exercises. This is not only a vital school activity, but is also of edu-

teachers in the grades. Observance of daily health rules, the making of booklets and the writing of stories and poems, all correlated with other subjects or projects, are stressed. The junior high school home economics department heads the work in foods and nutrition for the whole school. Rat feeding demonstrations conducted by the advanced classes are used by all grade teachers in their work in the study of foods, of balanced meals and of body needs.

The effectiveness of this part of the program is indicated by the physical growth and improvement of the children and by the comments from the homes on the children's improved health habits. Many parents have also spoken of the children's improved attitude and contributions to the home life, and of how much they themselves have learned from their children. Descriptions of this part of the school program have been recently published.¹

These are a few of the principal features. We feel that our pupils are developing emotional stability, that they are improving physically, growing intellectually and becoming socially effective. The school is striving earnestly to contribute to the achievement of all the seven objectives of education, not only by the children in school but also by the whole community.

Dedicated as a "house of service," perpetuating the heroism and sacrifice of the World War soldiers, true to the vision and ideals of its founder, this memorial school "carries on."

Why Daily Newspapers Should Have a Juvenile Page

Cosmopolitan daily newspapers could render a great service to boys and girls by introducing juvenile news and general news simplified to their intellectual level, according to Dr. William John Cooper, commissioner of education.

Newspapers to-day appeal almost entirely to adult intelligence and tastes, Doctor Cooper believes. More attention to the intelligence and tastes of young readers of high school age, and downward, in the composition of a paper, might be of great educational value. A special page set aside for that purpose might be an experiment worth trying.

He continues: Comic sections and sport pages have a general appeal among young people. Often papers carry pages which appeal only to very young children where prizes are awarded for drawings, letters, stories and various items of interest. However, the newspaper does not afford much of interest to those falling within and below the high school age.

The newspaper is written largely for the adult. News of children occupies but a small space. News that might be of interest to children is written with a maturity they cannot understand.

The powerful influence of the press upon individual and public opinion is well known. Spectacular stories written with skill and dramatic color grip the attention of some of the young people just

attaining the age to appreciate the newspaper. Many turn from good literature at this period to a cheaper kind of fiction not always in harmony with their school training.

It seems that there is an opportunity for the cosmopolitan daily to attempt to reach through some carefully planned system the hundreds of thousands of boys and girls who have vital interests well within the category of news. A special page might be introduced with this object as a part of its general policy.

Taxing of Professor's Salary Basis of Test Case

James V. Allred, attorney general of Texas, has announced that he will join with the attorney general of Maryland, counsel for the University of Maryland, counsel for the University of Illinois, and the attorneys general of various other states and counsels for state universities, in resisting an attempt on the part of the Federal Government to tax the salary of a professor in the college of law, University of Maryland, a state university.

The case, entitled *G. Ridgely Sappington vs. Commissioner*, is now pending in the board of tax appeals.

Education has been universally considered a governmental function or activity, Mr. Allred declared.

"This is particularly true of Texas," he said, "both by the civil and common law. The Mexican Constitution of 1824 provides that education is a governmental function. Like provisions were contained in the Constitution of Coahuila and Texas in 1827. That constitution provided for a general plan of public education. The Declaration of the Independence of Texas, the Constitution of the Republic of Texas and all of the constitutions of the state of Texas treat education as a governmental function."

Mr. Allred stated that if the Government is successful in the pending case, the salaries of every instructor in all the state educational institutions of higher learning in Texas will be subject to the Federal income tax, and that in addition thereto, the Government would, in all probability, attempt to extend this taxation to teachers in public schools.

He regards this as an unwarranted attempt on the part of the Federal officials to extend the powers of the Government at the expense of the states and believes that it is an attempted encroachment upon the rights of the states, unwarranted by history or by the Constitution. In his opinion, education is a purely governmental function and the salaries of all state employees engaged in educational work should be exempt from income taxes.

¹How Home Economics Improves Home Life, School Life, June, 1930; Home Economics and Community Building. A Practical Demonstration, Home Economics News, March, 1931.

How the City Superintendent Can Best Market His Services

The author presents an analysis of the vocational histories of 583 city superintendents, involving approximately 2,000 placements

By H. C. HAND, Assistant in Secondary Education, Teachers College, Columbia University

THE city school superintendent is so often obliged to shift from community to community to win professional advancement that his is not infrequently a modified form of gypsy existence. Few school boards feel that their communities can afford to pay more than a rather definitely fixed maximum salary to the superintendent. Consequently, when this level has been reached the school administrator usually finds it necessary to move to a larger community if he wishes to be in line for further salary advances.

Since the professional advancement of the city superintendent is so largely conditioned by his ability to secure increasingly favorable placements at more or less regular intervals during his career, any agency that can assist him in marketing his professional services to the best advantage may be of great service to him. Manifestly, no one administrator can by his own unaided efforts become adequately informed as to the extensiveness of the market in which he is attempting to sell his wares. To meet this need, large numbers of commercial teachers' agencies, college or university placement

bureaus and placement offices maintained by state departments of education have come into existence to serve as clearing houses where information relative to vacancies and to the qualifications of available men may be obtained. Friends, both professional and nonprofessional, are also frequently helpful in supplying information relative to desirable openings.

Although it is generally known that all the agencies and methods enumerated have proved helpful in meeting the problem of placement, little if any evidence has been presented relative to the comparative effectiveness of each. The superintendent who feels that the time has arrived when he can no longer afford to remain in his present situation undoubtedly wonders which means is likely to prove most helpful to him in his efforts to find and fill a desirable position. A similar question exists also in the minds of young men who are just completing their training in colleges and universities and who are faced with the problem of how to secure initial appointments in public school work. A knowledge of the relative extent to which each of these various

TABLE I—PERCENTAGES OF ALL PLACEMENTS RESULTING FROM INFORMATION SUPPLIED BY DIFFERENT AGENCIES*

Agency or Method	City Size Group					Total (583)
	Below 2,500 (369)	2,500- 4,999 (91)	5,000- 9,999 (63)	10,000- 24,999 (45)	25,000- 100,000 (15)	
Professional friends	27.3	22.0	22.5	21.5	23.7	25.4
Application solicited	14.9	18.4	20.7	16.7	19.6	16.8
Commercial teachers' agency	18.1	12.7	15.5	15.5	6.2	16.0
Nonprofessional friends	14.9	14.3	16.4	15.9	20.6	15.1
University or college placement bureau	13.3	11.8	9.1	8.9	12.4	11.9
State department placement bureau	5.3	4.4	3.5	3.2	..	4.4
No definite knowledge of vacancy	3.1	3.0	1.8	4.1	3.1	2.9
Other and not reporting	3.1	13.4	10.5	14.2	14.4	17.5
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

*Numbers in parentheses in this and in subsequent tables indicate the number of superintendents in each city group.

TABLE II—PERCENTAGES OF SUPERINTENDENTS WHO REPORTED METHODS BY WHICH THEY LEARNED OF FIRST POSITIONS

Agency or Method	City Size Group					Total
	Below 2,500 (369)	2,500- 4,999 (91)	5,000- 9,999 (63)	10,000- 24,999 (45)	25,000- 100,000 (15)	(583)
College or university placement bureau	23.0	18.7	11.1	11.1	20.0	20.1
Professional friends	20.0	22.0	22.2	15.5	6.7	19.9
Nonprofessional friends	14.9	16.5	25.6	24.4	20.0	17.2
Commercial teachers' agency	14.9	14.2	12.7	17.7	..	14.6
Application solicited	10.0	11.0	15.6	6.6	26.7	10.8
State department placement bureau	4.2	3.3	3.2	2.2	..	3.6
No definite knowledge of vacancy	2.8	5.5	3.2	4.5	..	3.4
Other and not reporting	10.2	8.8	6.4	18.0	26.6	10.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

agencies has been successful in placing men in new positions should be of value in affording some basis for a rough evaluation of their relative effectiveness.

This paper summarizes the information relative to the agencies and the methods utilized in securing employment revealed by an analysis of the vocational histories of nearly 600 city school superintendents. At the time the investigation was conducted (1929) these men were serving in communities ranging in population from 100,000 to less than 2,500, in the states of Illinois, Iowa, Minnesota, Montana, North Dakota, South Dakota and Wisconsin. In the forms of inquiry by means of which the vocational histories were collected, there were provided spaces in which the cooperating superintendents were requested to indicate the agency or method by which they first learned of the vacancies. This information was requested for each position held in public school work.

In the total combined experiences of the 583 city superintendents who cooperated in this investigation, approximately 2,000 placements were made. First knowledge relative to these vacancies came

to the men through a number of different avenues. The comparative frequency with which each agency or method was employed has been summarized in Table I.

The combined activities of professional and non-professional friends were responsible for transmitting first intelligence relative to vacancies in approximately as many situations (40 per cent) as in all other reported agencies or methods combined (42 per cent). This help from friends was acknowledged by nearly identical percentages of superintendents in the smallest and largest cities.

Wide variations were found in the number of vacancies filled by commercial teachers' agencies, college or university placement bureaus and placement offices maintained by state departments of education. An almost negligible proportion (less than 5 per cent) of the nearly 2,000 positions were secured through the activity of the last named agency. Commercial teachers' agencies were successful in filling approximately a sixth of the total number of vacancies, while 12 per cent were filled by candidates enrolled in college or university placement bureaus. In general, the larger the com-

TABLE III—PERCENTAGES OF SUPERINTENDENTS WHO REPORTED METHODS BY WHICH THEY LEARNED OF PRESENT POSITIONS

Agency or Method	City Size Group					Total
	Below 2,500 (369)	2,500- 4,999 (91)	5,000- 9,999 (63)	10,000- 24,999 (45)	25,000- 100,000 (15)	(583)
Professional friends	23.8	18.7	28.6	17.8	33.3	23.6
Application solicited	17.7	29.6	23.7	33.3	26.6	21.6
Commercial teachers' agency	17.9	9.9	11.1	6.7	6.7	14.6
Nonprofessional friends	13.3	13.2	9.6	11.1	20.0	12.9
College or university placement bureau	7.9	4.4	6.4	2.2	6.7	6.7
State department placement bureau	5.2	4.4	3.2	2.2	..	4.4
No definite knowledge of vacancy	1.6	2.2	..	1.2
Other and not reporting	12.6	19.8	17.4	24.5	6.7	15.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

munity the less the superintendent has utilized the services of each of these three agencies. Their chief function, apparently, has been to fill the vacancies that have occurred in communities of smaller populations.

One out of every six of the positions was filled by a man whose application had been solicited, presumably as the result of superior service rendered in the previous superintendency. Less than 3 per cent of the openings were discovered by "blind" applications made with no definite knowledge of an existing vacancy.

How Superintendents Learn of Vacancies

A knowledge of the methods that have been most profitably employed by the novitiates of other years is of great importance to the prospective administrator in meeting the perplexing problem of how best to break into the work of his choice. It is not surprising to learn from Table II that the college or university placement bureau (20 per cent) was the most effective single agency in placing newly graduated men in their first positions in public school work. More worthy of comment is the fact that nearly as many vacancies (37 per cent) were first learned of through friends as through the combined activities of college or university bureaus, commercial teachers' agencies and placement offices maintained by state departments of education (38 per cent).

That the state department of education placement bureaus played a relatively unimportant part in helping these men find their first positions is revealed by the fact that only approximately 4 per cent of the administrators reported this agency. An almost identical proportion made contact with their first positions by making "blind" or "broadcast" applications with no definite knowledge of an existing vacancy. It is of interest to note that a tenth of the total number were invited to apply for their first positions in public school work. This method was reported with greater relative frequency by the men in the larger superintendencies.

The information relative to the agencies or methods employed in learning of first positions, described above, though of considerable significance to the prospective school administrator, will probably be of but mild interest to the superintendent who is faced with the present problem of placement. It is to be expected that he will be much more interested in discovering through what avenues first knowledge relative to present positions came to the men now filling positions in the larger communities. His problem is where best to look for information relative to desirable vacancies.

Table III shows that over a third (36 per cent) of the men who reported acknowledged the services of

friends in bringing to them their first intelligence relative to the present position. The combined efforts of commercial teachers' agencies, college or university placement bureaus and placement offices maintained by state departments of education resulted in only a slightly greater number of first contacts with present positions (26 per cent) than were brought about by the initiative of school boards through the soliciting of applications (22 per cent). The last mentioned finding may be regarded as evidence that school boards are alertly conscious of outstanding administrators in other communities and that they refuse to be limited in their selection of a chief executive to those who may see fit to apply when a vacancy is announced.

On the basis of the experiences of the 583 superintendents it appears that the commercial teachers' agency is of markedly less service, relatively, in placing men in the larger than in the smaller superintendencies. State department placement bureaus served but a twentieth or less of the administrators in the smaller communities and none of those now in cities above 25,000 population. Practically none of the men came into their present positions as the result of application made without definite knowledge of a vacancy.

Certain general tendencies are revealed by comparisons of the data reported in Tables II and III. As the superintendents have put more years of experience behind them, they have found professional friends of greater help in learning of vacancies. With the passing of time, nonprofessional friends as well as college or university placement bureaus have proved less helpful. Commercial teachers' agencies varied but little in the relative extent of their service. Bureaus maintained by state departments of education were consistently inactive. The proportions of the superintendents whose applications were solicited evidenced an increase as the men gained in years of service.

University Offers Free Rent as Incentive to Scholarship

Students at Southwestern University, Georgetown, Tex., who maintain grades of from 90 to 100 are not charged room rent. The president of the university, Dr. King Vivion, has provided at his own expense a dormitory which is known as King's Palace, for worthy students who are not able to pay all their expenses. Ten students were admitted under such conditions last year.

B grades or from 80 to 90 bring a penalty of \$1 a week for the room; grades of C average \$2 a week; D grades carry a penalty of \$3 a week and automatic dismissal from the school.

The Professional Career and What It Offers the Modern Youth

Never before were the opportunities greater in the learned professions of theology, law and medicine; never was the demand so insistent for a trained leadership

By W. J. MAYO, M.D., Rochester, Minn.

AS a young man was starting away to college, his father on leaving him at the train said: "George, I trust you will remember that you have been born of respectable people."

We should try to impress on our children the fact that our country is respectable because of those who have gone on before, who built up as best they knew a form of democracy in which equal opportunity should be maintained for all. But let us not forget that the older generation is looking through a partly open door into a future which by example and precept it can influence, but which it has not the prescience to guide or control.

Watching the Changes Over the Years

As a regent of the University of Minnesota for more than twenty-four years, I have been impressed with the quickening speed of our social life in relation to education.

In the past the three learned professions were theology, law and medicine. In the present these three ancient professions are called on to adapt themselves to an extraordinary change in the life and living conditions of the people, due to almost incredible scientific and industrial progress.

Religion deals with the emotions, which are the most primitive of man's natural reactions. It carries spiritual comfort to the afflicted when human power fails and is necessary to the happiness of mankind. The religion of to-day is religion founded not on fear but on a sense of moral responsibility. The church is making heroic attempts to teach things of the spirit and to inculcate the principles of morals and ethics into human relations in a rapidly changing and confused world.

Law has become involved in a maze of petty details that often obstruct or defeat its object. American law is case law, based on court decisions promulgated in the past under social conditions of a bygone day which are difficult to apply to a new

world: horse and buggy law, so to speak, applied to an automobile and flying machine age. The courts can change but slowly, and in the attempt to meet modern exigencies are often hampered rather than helped by the many legal enactments passed by legislative groups.

Medicine, like theology and law, faces serious difficulties, but of a different nature. Theology and law are attempting to correlate the yesterdays of life with the problems of to-day; medicine deals with the tomorrows. The advance in medicine has been so rapid that an enormous mass of undigested information has accumulated which we have had neither the time nor the perspective to analyze properly, to say nothing of correlating it with past experience. As a result the art of medicine has fallen behind the science of medicine. Medical education is in a state of flux, and in the teaching of medicine, training the mind is replacing training the memory.

The opportunities for young men for useful careers in the professions were never greater than to-day, and leadership was never more necessary.

Helping the New Trustee in His Duties

The department of public instruction for Indiana urges the county superintendent to use extra effort in starting the new trustee in his multitude of duties. This means advice in matters of finance, reports, the choice of teachers, the buying of equipment and supplies, the granting of transfers and the management of transportation. The great bulk of the work will be done directly and personally, but group meetings are a distinct help. The overlap of terms of trustee and superintendent is an invaluable asset in the administration of schools, and should be utilized to the fullest extent.

What Is Wrong With Our Graded System?

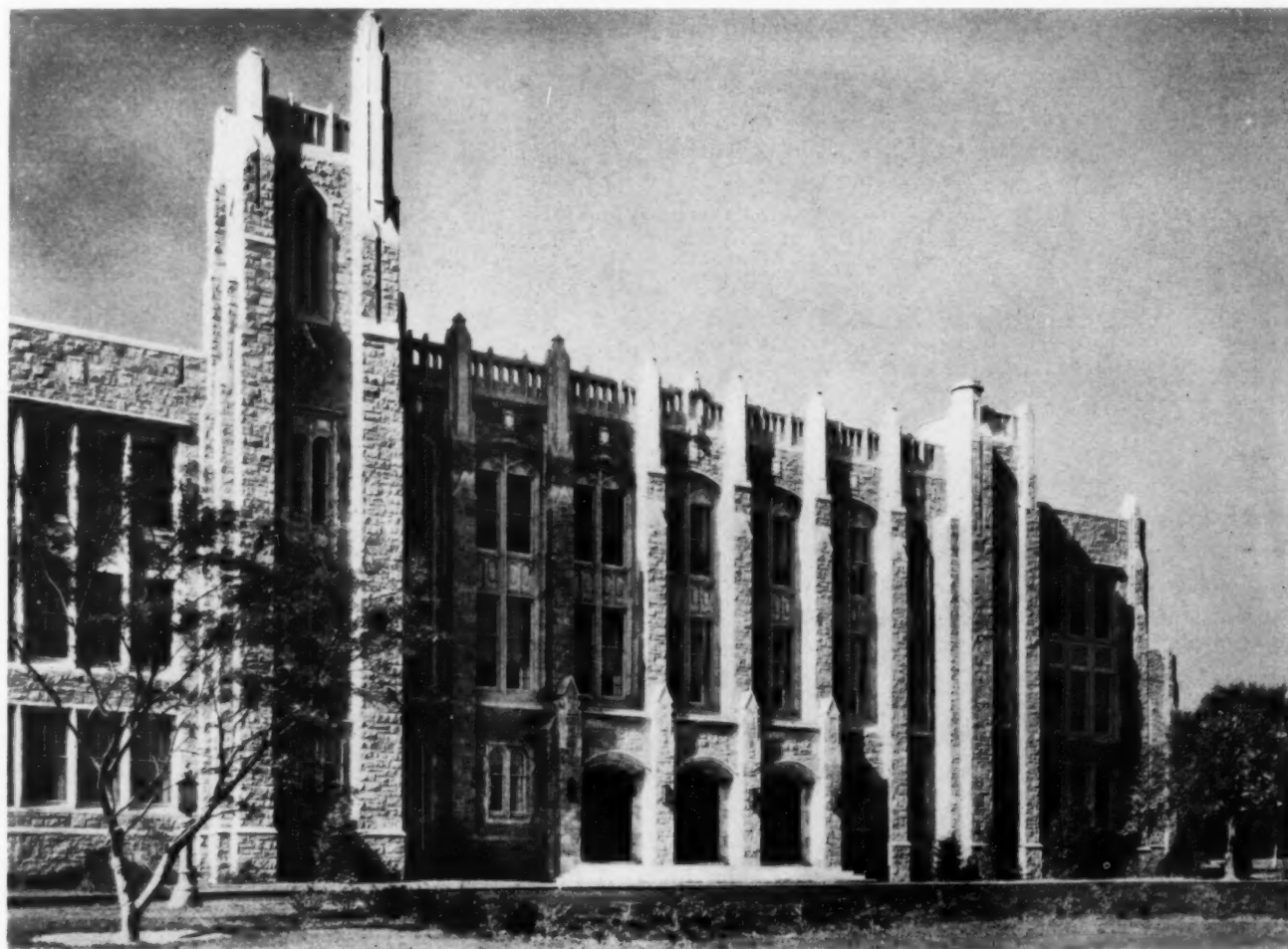
Many criticisms have been leveled at the graded school system on the ground that it demands uniformity, encourages waste of time and stifles pupil initiative

By PHILIP A. COWEN, Research Associate, Educational Research Division, New York State Education Department

GRADED schools developed during a period of approximately half a century—from about 1820 to 1870. A number of influences contributed to this development of schools into a system of grades. However, the system did not fulfill the most sanguine hopes of its friends and projectors. Instead of recognizing each pupil's individuality and particular needs, it taught

all pupils the same subjects and held them to the same standard. Consequently, criticisms were heaped upon the system almost as soon as it had become generally established. Some of these criticisms are presented here because they throw light on present educational problems.

The graded system, according to E. E. White, demanded too much uniformity. The more perfect



Illustrations by courtesy of Starrett and Van Vleck, architects, New York City.

The main entrance and tower of the White Plains High School, White Plains, N. Y.

the system the greater was the uniformity. White said:

"That we may better consider these defects let us glance at the mechanical features of a system of graded schools—not a real system as actually administered anywhere, but a system ideally perfect as a mechanism.

"In the first place, it maps out and prescribes a definite and detailed course of study and instruction. . . . The pupils are next divided into grades or classes, corresponding to the subdivision of the course, and all the pupils of each grade or class are required to pursue the same studies, to the same extent, in the same order and at the same rate of progress. In other words, the mechanism of the graded system demands absolute uniformity in each grade, and the more nearly this essential condition is realized, the more nearly perfect is its mechanical operation.

"This view discloses the difficulties that attend the administration of the system. As a mechanism, it demands that pupils of the same grade attend school with regularity, and that they possess equal attainments, equal mental capacity, equal physical vigor, equal home assistance and opportunity, and that they be instructed by teachers possessing equal ability and skill. But this uniformity does not exist. . . ."

White pointed out that since conditions did not permit the absolute rigidity demanded by the system, there was a tendency to force the uniformity in order to make the system succeed.

In order to prevent some of this undesirable uniformity White suggested frequent reclassification of pupils, broad examinations and promotion based upon several examinations instead of one.¹

Why Standards Must Be Flexible

White's criticisms of the graded system apply in a large measure to our present schools. In most schools, we ask all pupils to pass the same standard. In so doing we demand, if we are fair to each pupil, all of the uniformity of which White spoke. It is evident, however, that every child is constituted differently, has a different social and economic background and receives different treatment at the hands of his teachers. Therefore from the standpoint of variability in many respects it is unfair to ask all pupils to meet the same standard in school.

The question that White raised regarding examinations having a tendency to narrow instruction has particular significance for school men in New York State. One may frequently hear that teachers teach only for the regents' examinations,

that a teacher's success is based upon her ability to have pupils pass these examinations and that the state syllabuses in various subjects prevent the exercise of local initiative in teaching. A study to determine the validity of these charges may be necessary. In the meantime, however, there is danger that the uniformity demanded for the success of a system may rob the pupil of part of his educational opportunity.

Several of the efforts to overcome the difficulties arising from the graded system are noteworthy, for example, Shearer's Elizabeth plan, the Cambridge plan, W. T. Harris' St. Louis plan and Kennedy's Batavia plan.

Attempting to Solve the Problem

Shearer said that to obviate the lock step many superintendents had permitted teachers to promote pupils at any time. He pointed out, however, that pupils once properly classified would not be helped by this device. Others who became discouraged with classification returned to the ungraded plan.

Shearer's plan involved placing pupils of a grade in a room alone, forming groups of from eight to twenty pupils for teaching the essential branches, reclassifying pupils frequently, abandoning tests for promotion in favor of the teacher's estimate and making the fundamental grouping upon achievement in arithmetic.¹

The Cambridge plan provided two curricula of different lengths. Pupils could finish the elementary school in four or six years. There was also provision for switching from one "track" to the other.²

W. T. Harris went to the extreme of providing many classes, each four or five weeks apart. Promotion from one to another was permitted at any time. A pupil who could make up the work required for entrance to the next class was advanced. This plan was intended to overcome the uniformity demanded by the regular graded system.³

In Batavia, N. Y., John Kennedy placed two teachers in a room. One devoted her time to group instruction and the other to individual teaching. He thought that he had discovered a "law" of education, that pupils should have an equal amount of group and individual instruction. His plan gained considerable attention but it was not used successfully in many other places.⁴

An experiment with grouping carried out at the Boston English High School in 1898 is particularly

¹Shearer, W. J., *The Grading of Schools*, H. P. Smith Publishing Company, New York City, 1899, p. 24.

²National Education Association, *Addresses and Proceedings*, vol. 33, p. 333.

³Educational Review, vol. 8, p. 388.

⁴American Education, *Kindergarten to College*, vol. 7, p. 457. Annual Report of the New York State Superintendent of Public Instruction, vol. 46, p. 46.

¹National Education Association, *Addresses and Proceedings*, vol. 15, p. 254.

important. Pupils were grouped according to achievement. Then the higher divisions were given a larger number of topics in the subjects studied, or else the ground, while nominally no more extended, was covered in a more thorough fashion. As a result teaching in the higher grades was freer and more spontaneous.¹ The significance of this experiment lies in the attempt to differentiate subject matter and instruction for the high and

liminary to the bachelor's degree, for which Princeton's dean demanded the traditional four years, while Harvard and Chicago Universities were ready through their presidents to compromise on a three-year course."

Hartwell proposed two ways to achieve greater economy. They are as follows:

"There will be real economy in rearranging our quadrennial courses in triennial groups. . . . In-



The imposing entrance to the Eastview Avenue Junior High School, White Plains, N. Y.

low groups. This is probably one of the first instances of such a practice.

Criticisms of the graded system because of its wastefulness helped to bring about some of the experiments that have attempted to eliminate the uniformity.

President Charles H. Eliot of Harvard University was one of the leaders in this criticism. He said that schools could be more efficient if the terms were shortened and if worthless subject matter were eliminated.²

The same solution, shortening the school term, was discussed by Hartwell at a Boston meeting of the National Education Association. He said, "Columbia stood for a two-year college course pre-

stead of five quadrennial periods, I propose six triennial periods, effecting a saving of two years' time for business or professional life. . . .

"There is another important direction in which both time and money may be saved, and thus economy in education secured. It is by strict adherence to the principle of individual programs for every pupil with promotion by subjects instead of by general averages."¹

Abraham Flexner said that the graded school wasted pupils' talents, individual interests and aptitudes. He proposed "individual" teaching as the remedy for this difficulty. In Louisville, Ky., however, he used small groups.²

Frank D. Boynton in 1900 wrote to *New York*

¹Educational Review, vol. 16, p. 81.

²National Education Assn., Addresses and Proceedings, 1892, p. 617.

¹Educational Review, Sept., 1905, p. 159.

²Ibid., vol. 18, p. 356.

TABLE I—PUBLIC SCHOOL PROMOTION PLANS 1863-94*

Date	Location	Plan of Promotion
1863	Providence, R. I.	Examinations by the superintendent every six months
1865	Newport, R. I.	Thorough written examinations the determining factor
1867	Madison, Wis.	Examinations at the close of the term and upon superintendent's desire
1867	Worcester, Mass.	Teacher's judgment except promotions to high school
1873	St. Louis	Frequent reclassification—every ten weeks
1885	New York City	Semi-annual in the elementary and annual in high schools
1886	Albany, N. Y.	Semi-annual on superintendent's written examination, principals fix grade standards, teachers may promote at their own risk regardless of standards at any time
1887	Lockport, N. Y.	Annual promotions based upon general examinations
1889	Dunkirk, N. Y.	Annual promotions in primary and intermediate grades on superintendent's examinations—to high school on regents' certificate
1889	Ithaca, N. Y.	Grades 3-8 promote on: regularity, punctuality, deportment and scholarship
1889	Rochester, N. Y.	Written examinations for all promotions
1891	Brooklyn, N. Y.	Teachers' recommendation determines promotion
1891	Hudson, N. Y.	Monthly examinations, semi-annual examinations, daily record
1892	Hornellsville, N. Y.	Recommendation of principal and teacher
1893	Jamestown, N. Y.	Examinations for promotion abolished below ninth grade
1893	Olean, N. Y.	Examination practically abolished below high school
1894	Lockport, N. Y.	Judgment of teacher, principal and superintendent

*Annual Reports of the New York State Superintendent of Public Instruction, 1887-97, American Journal of Education, p. 108.

Education as follows: "Another source of waste is in keeping primary children in school for long periods. Last year when New York City found her facilities for the accommodation of children in the lower grades far below what were required, it was arranged that one-half the children in the districts should attend in the forenoon, the other half in the afternoon. It was surprising to find that the children thrived just as well intellectually upon a half-day as upon a whole day in school. It

frequently happens that primary teachers have as many as sixty pupils assigned to them. The transition from no school to five hours a day is a strain upon the child that can be only approximately understood by adults. . . ."¹

Boynton described an experimental class that was organized in Ithaca, N. Y. At first, fourteen young pupils were kept in school only forty-five

¹Boynton, Frank D., *Waste in Education*, New York Education, Kindergarten to College, vol. 4, p. 166.

TABLE II—FREQUENCY AND PREFERENCE OF PROMOTION PLANS IN THE UNITED STATES IN 1908*

	Reports	Tried	Not Tried	Favored	Not Favored	Percent. Who Favored
Cambridge plan	965	78	380	235	122	66
Elizabeth plan	965	270	222	349	98	78
Pueblo plan	965	203	270	278	149	65
Batavia plan	965	135	333	151	256	37
Departmental teaching	965	471	170	467	146	76
Group teaching	965	529	97	514	65	89
Precademic school	965	49	371	116	260	31
Extension classes	965	57	406	235	119	66
Special classes for overage or foreign-born children	965	274	248	537	47	92
Ungraded classes	965	275	260	553	42	93
Promotion by points	965	78	363	192	179	52
Chicago plan	965	155	305	240	155	61
North Denver plan	965	162	267	220	161	58

*Hartwell, Charles S., *The Grading and Promotion of Pupils*, Educational Review, vol. 40, p. 379.

minutes daily. Then the session was lengthened to one hour and later to an hour and a half. The results in terms of accomplishment were comparable with regular classes on longer time. Boynton said, "It is my opinion that any class of children in the primary schools of this or any other city can be divided into small sections on short time with the same satisfactory results."

The idea of having a shorter school day was advocated in New York City by Superintendent Maxwell in 1905. However, because of strong public

a questionnaire to determine the most frequently used promotion plan and the ones of greatest preference. There were 1,001 direct replies of which 965 were usable. These are summarized in Table II. These plans included practically all of the schemes in use, as only fifty-five of those answering said they were trying plans not mentioned.¹

Table II is difficult to interpret because of the way it is constructed. For example, seventy-eight schools said they had tried the Cambridge plan. However, 235 favored it and 122 did not favor it.



A more informal type of architecture has been followed in an elementary school at Garden City, L. I.

sentiment the committee on elementary schools found it inexpedient.¹

In the development of grades following 1848 there was a decided tendency to base promotions upon annual examinations prepared by the superintendent of schools. As the system was criticized for uniformity and waste these practices were modified. Semi-annual promotions according to teachers' estimates came to be the practice. This shift is illustrated in Table I.

In 1908 Hartwell, with a committee of New York principals and heads of departments sent out

One should know how the seventy-eight who tried it reacted. Only one valid conclusion can be drawn from this table. On the whole, the 965 schools each tried three plans, and each favored more than four plans. The diversity of opinion is apparently as great as the diversity of practice.

Thomas W. Gosling, superintendent of schools, Akron, Ohio, in 1910 wrote his criticisms of pupil classification so well that they are quoted here somewhat in detail. In this regard Mr. Gosling discussed his various objections and concluded:

"But, after all other explanations have been

¹American Education, Kindergarten to College, vol. 8, pp. 270 and 608.

²Hartwell, Charles S., The Grading and Promotion of Pupils, Educational Review, vol. 40, p. 375.

made, there is yet one of which little has been said. It is what I shall call 'the fallacy of classification.' We have in the schools pupils of all grades of ability and interest, and we classify them, not according to their interest and ability, but according to the number of years they have spent in school. Then we proceed to instruct them in such a way that a majority may accomplish enough to entitle them to pass into the next grade.

Why Grading Is Unfair to All Pupils

"By this method of instruction and classification a positive injury is done to both the most efficient and the most inefficient in the class. The inefficient are asked to do more than they are able to do and, inevitably and naturally, they fail or are promoted by grace into a grade where they are still more unfit for their tasks. The efficient pupils, on the other hand, being required to do much less than they are able to do, are injured in one of two ways: either they conceive the notion that life is easy and may be forced to yield them rich returns with little effort or, retaining their interest and ambition for a time, through a disuse of their powers, they suffer paralysis and atrophy.

"Here, then, we have the spectacle of a public school system, supported at great expense, failing to reach two important classes of prospective citizens, the weak and the strong. It is clear that some plan ought to be devised whereby we may reach all who come to us to prepare for citizenship.

"What, then, is the remedy? First of all, let us no longer emphasize 'passing' and 'graduating' because such emphasis gives pupils a wrong conception of their tasks and creates a condition whereby many who are really unworthy receive the conventional stamp of approval. To 'pass' or to 'graduate' may mean much or it may mean little. . . . The standard that we should set is a standard of faithful work only."¹

In making this criticism Gosling pointed out one of our greatest educational weaknesses to-day. Entirely too much emphasis is placed upon passing and graduating. Failure is accompanied by retardation in social grouping. Failure may need particular treatment to effect a remedy, but as it is treated demotion and retardation merely make study less attractive. The primary aim of most pupils is to pass, hence they do just enough to achieve that end.

Gosling further suggested that a high school of 100 pupils be divided into three groups on the basis of subject ability. He assumed that most of the pupils would fit into the high, low or middle groups of all subjects and that few would need to

be in the high group for English, the middle for algebra and the low for botany. We find, however, that individual differences vary so widely that a large percentage of pupils grouped according to subject ability would be irregular.¹ In this respect Gosling did not suggest a method of grouping that would solve our present dilemma. Nevertheless, his criticisms of schools in 1910 are still valid and the general situation is even worse.

Martin, in discussing this fallacy of classification, said, "Under the mechanical influence of the graded system, the purposes of the individual school became still more narrow: to provide a measured quantity of knowledge—hence, of measurable knowledge; to fit its pupils for the next grade—grammar school, high school, college; to enable them to get percentages and pass examinations. Through this stage most schools have recently passed. Some are still in it."²

Evidently, Martin thought schools were getting away from "a measured quantity of knowledge," but he was mistaken. Our schools do a more extensive "credit" bookkeeping than ever before. This phase of education is so well developed that the work of a registrar is organized on a professional basis in colleges and universities. Individuals are measured by their credits and points for degrees. In most cases the existing degrees fit the needs of the cases, but if none suitable is found a new degree is created. A person is seldom measured by his understanding and solution of current economic, social or scientific problems. The emphasis of education to-day is placed upon the units, points, credits and degrees, and not upon the better understanding and enjoyment of life.

How the Taxpayers' School Money Is Divided in New York

That \$86 out of every \$100 of the taxpayers' money spent by the public schools of New York City goes for teachers' salaries and educational supplies while only \$3 is spent for administration is pointed out in figures recently published by Dr. George J. Ryan, president of the board. The remaining \$11 is used to keep school buildings in good condition and to supply them with coal in the winter and a playground in the summer.

The figures compiled by Doctor Ryan were for the fiscal and calendar year of 1930 and did not include the cost of erecting new school buildings and additions, these expenditures coming from a separate budget.

¹Cornell, Ethel L., *The Effect of Trait Differences in Ability Grouping*, MSS.

²Martin, G. H., *The Evolution of the Massachusetts School System*, D. Appleton Co., New York City, 1894, p. 238.

¹Educational Review, vol. 39, p. 395.

From Basket Lunches to Cafeterias

—A Story of Progress

This is the first of a series of articles to appear monthly on the administrative problems of school feeding in large and small school systems

By HOWARD L. BRIGGS, Director of Vocational Education, and CONSTANCE C. HART, Supervisor of Lunchrooms, Board of Education, Cleveland

ICHABOD CRANE undoubtedly brought his lunch to school as likewise did his pupils. We might go back even further in history and point out that whenever tribal groups assembled for instruction the "inner man" was seldom neglected. Even organized school feeding dates back more than a hundred years in Europe, for it has long been recognized that the mind does not function effectively in a poorly nourished body.

In this country the migration from the farm to the city resulted in the evolution of the "little red schoolhouse" into much larger units, covering very definite neighborhoods. The two-session system was the result. This system made it possible for children to return home for their noon meal, but it was soon discovered that a school ran more smoothly if it functioned continuously and that the cost per unit pupil station was reduced if the plant operated more hours a day. These elements alone made it desirable to establish lunchrooms within the school plant. Then, too, it was soon evident that the schools were surrounded by small stores of doubtful sanitation. Street venders and even school janitors attempted to sell food to the children. Children are always hungry and if the schools do not supply food, other agencies will.

For the Poor First

An even more important factor, however, developed from the inevitable poverty that is to be found in large industrial communities. Through the tendency of both parents to seek employment and through medical research, which revealed an appalling lack of knowledge concerning a well balanced diet, supervised feeding became most desirable.

Every community has its charitable organizations and a small child is usually one of the first objects for consideration. Practically all of the organized lunchroom set-ups in the country have,

to some degree, been developed through the activities of charitable committees, which recognize the evils and dangers of malnutrition.

In Cleveland in 1909 the Women's Federation of Clubs established elementary school feeding in several centers. The purpose of this committee was to provide breakfast to anemic and undernourished children. Nineteen children formed the first group. The board of education supplied all the equipment and the committee provided a woman to prepare the food.

A History of the Movement

In 1912 classes were started for open air groups, and in 1915 the Society for the Promotion of the Interest of the Blind undertook a similar task. The meals varied from supplementary feeding to an entire meal. Eventually twelve schools in which blind, crippled and tuberculous children were enrolled were provided with food. The child paid a penny for his food and the balance was made up by voluntary contributions. Cleveland's experience is typical of that of many other cities.

In Philadelphia as early as 1894 the Star Center Association organized in one school penny lunches for the poor, and eventually through the Lunch Committee of Home and School spread the gospel of the penny lunch to other centers. The association continued to provide lunches for elementary school children until 1915. In more recent years the parent-teacher associations have been active agencies in establishing lunchroom systems. This was true in the case of Birmingham, Ala, in 1907.

As early as 1893, however, Cleveland had not overlooked the feeding of high school pupils, although the arrangements were more or less haphazard. In order to protect the pupils from the dangers of food sold by venders seven Cleveland principals made arrangements with concessionaires whereby they were to provide the pupils

with basket lunches. The basket lunch, however, does not seem to have been a common element in the development of lunchrooms in the majority of cities.

In other parts of the country varying procedures were tried. The pupils of Wadleigh High School, New York City, had their own organization and in Boston the Women's Industrial and Educational Union in 1894 contracted to equip all lunchrooms and run them without profit.

In 1909 definite requests were made by a board of principals in Cleveland for forty-five-minute luncheon periods, which resulted in the architects' eventually arranging for five high school lunchrooms. These later included the normal school and the high school of commerce. Quite naturally the management of these lunchrooms was taken over by the same concessionaires who had provided basket lunches.

The next need was centralized supervision, and a supervisor of lunchrooms was appointed under the director of medical inspection. Unfortunately she lacked authority to enforce her recommendations. Her duties were to inspect all lunchrooms

and to recommend a standard scale of prices and uniform food. She was to receive from the concessionaire a report covering the number of portions served, receipts, profit and expenditures for food and service. In all cases the board was to supply all the necessary equipment as well as heat, gas, light and water, and to replace all worn and useless equipment. The concessionaire agreed to replace or pay for all equipment lost or destroyed due to other than natural causes and to provide food of a quality approved by the supervisor of lunchrooms.

Practically all systems at some period have gone through the concessionaire stage. In most cases it formed the next logical step to the work started by charitable groups. Central High School, St. Louis, fed its pupils under a concessionaire arrangement until 1903. In some cities the concessionaire arrangement is still in effect. In other communities it has been tried and found wanting, because there is no reason why any profit should be made from food purchased by the children of the community. The concessionaire has returned, in some cases because school executives who have



The basket lunch purveyors originated the "hand-out" idea.



Hungry pupils are quick to patronize the fly surrounded horse and wagon, where the "dog" and "hamburger" of doubtful antecedents are sold.

been appointed to administer lunchrooms are lacking in sufficient business training or in a knowledge of food standards to enable them to carry on successfully.

The next step in the growth of the lunchroom system in Cleveland came in 1918 when a trained dietitian was appointed. The work at this stage was no longer under the medical department. In 1919 the management of individual school lunchrooms was assigned to home economics teachers under the already appointed central office supervisor. In most cases the lunchroom management was an added duty to the teaching job and the output of the home economics classes was utilized for counter service. At this time buying and accounting were centralized, standards for equipment were attempted and a uniform scale of wages and food prices was considered. The serving of open air classes and other special groups was also taken over, thus eliminating the concessionaire.

The need for trained dietitians made the home economics teacher the natural selection. Columbus, Newton Center and many other Ohio com-

munities employed her services for lunchroom management. The utilization of home economics equipment and output was an additional factor. The end of this period was caused largely by the growth of the lunchroom system to such proportions that it became a large business requiring full-time employees and commercial equipment. Further, the quantity of food required soon made the home economics class a production group practicing much repetition, with the danger of limiting the scope of the pupil's education.

Despite many variations in the procedures followed in different cities, the home economics departments still control the lunchroom systems in most cases. In 1909 a home economics graduate was employed to manage the lunchroom of William Penn High School for Girls, Philadelphia, the board of education providing the equipment only. Classes of girls' vocational schools of several cities learned lunchroom service through actual practice in running the school lunchroom. This plan is still in vogue in many schools of this type.

Since practically all of the home economics

teacher's time in Cleveland was devoted to lunchroom management, it was a logical step to appoint her to this service as a full-time lunchroom manager. The entire system was approaching the status of a business concern with educational and health objectives, administering large sums of money and functioning efficiently.

In rapid sequence came the transfer of the manager's pay roll from the educational budget to a lunchroom fund. The same procedure took place in regard to the office pay roll. Supervisor, purchasing agent, bookkeeper, employment manager, clerical help, cleaning supplies, stationery, replacement of movable equipment, managers and help, all became part of a functioning business where receipts must equal expenditure if the pay roll is to be met. Similar situations developed with slight variations in Philadelphia, St. Louis, Springfield, Pittsburgh and other cities. While some made the transition directly from the concessionaire stage, a few were organized on this basis from the start.

The expenditures from lunchroom receipts for equipment, replacements, initial installations, salaries and other items vary with the communities. There is no absolute practice in this matter. Modern school lunchroom systems, however, have much in common, which has been arrived at through varying approaches.

The administrative organization of school lunchrooms is far from uniform throughout the country. It must of necessity vary with the administrative set-ups of the various school systems. In St. Louis, from 1903 to 1908, the commissioner of supplies acted as "trustee" for the receiving and disbursement of all lunchroom funds, and was jointly responsible with the superintendent of instruction for lunchroom administration. In 1908 a special lunchroom fund was established, and in 1912 the supply commissioner was given full charge of lunchroom administration, "except for the conduct and deportment" of the pupils, which was graciously conceded to the superintendent of instruction.

Who Runs the Lunchrooms

Newark, N. J., operates lunchrooms under the administration of an alumnae association, and in Washington each principal runs his own lunchroom with the advice of a teachers' committee. A physician in St. Paul, Minn., as a member of the division of hygiene, has general oversight of the lunchroom problem, while in Columbus, Ohio, the home economics head is in charge. Buffalo, N. Y., seems to be shifting from home economics supervision to the employment of a commercially trained cafeteria operator. Questionnaires reveal

the following variations in the responsible heads of public school lunchrooms: home economics department, cafeteria manager, committee, contractor, parent-teacher association, director of schools, principal, school committee, superintendent of lunchrooms, penny lunch association, supply commissioner, women's industrial union, lunchroom director, alumnae association and concessionaire.

In Cleveland the lunchrooms function as part of the educational department, with purchasing and financial responsibilities delegated by the director of schools and the clerk-treasurer respectively to the superintendent of instruction through the lunchroom department.

In this article it is not our purpose to describe in detail the administrative organizations of the various lunchroom systems. This material will follow in its proper sequence. It is important to recognize, however, the rapid growth of the public school lunchroom movement and the magnitude of the undertaking involved.

The Lunchroom's Justification

The Cleveland lunchroom sales for last year amounted to \$721,250, not to mention fifty-two cents, for our average sale is in pennies—ten cents and one mill to be exact—in our junior high schools. The control must be effective enough to operate without profit or loss and accurate enough to figure these items in mills. To serve 6,500,850 pupil meals a year is not a small responsibility.

The educational significance of public school lunchroom management is the paramount issue. It is their only justification. Unless the efficiency of the pupil as a learning mechanism is improved through intelligent and timely feeding, and unless economy in the use of the school plant is accomplished, there is little excuse for the public school lunchroom. Management, therefore, is an educational undertaking which gives due consideration to, and proper weighting of all factors involved.

Efficiency in public school lunchroom management is arrived at only after experience in this particular field, for it is comparatively new and filled with many pitfalls. No one system will effectively meet the requirements of all public school conditions, because of basic differences in the local administrative organizations.

The Cleveland objective in operating lunchrooms within the public schools may be stated as follows: "To make available to the public school children warm lunches of the maximum nutritive value, carefully prepared under sanitary conditions, at a minimum cost per service and to develop upon the part of the pupils intelligent discriminations in selecting food."

Ways That Help the Superintendent to Make the Most of His Day

By budgeting his time, by carefully planning for every moment and by employing modern office aids the small school administrator can lessen his labor and increase his efficiency

By F. E. HENZLIK, Professor of School Administration, University of Nebraska

AN ANALYSIS of the duties and activities of superintendents in a number of small school systems in the Middle West revealed the fact that those who complain most about the lack of time usually have in their school system one or more of the following conditions: lack of proper organization and responsibility for activities; lack of foresight and order; lack of proper timesaving devices and aids, and a lack of proper working schedules.

The following list of activities is one of the poorest submitted in the survey and is an example of most of the weaknesses pointed out in this article. This superintendent stated: "My time is not my own to do with as I desire but I must do the things that are requested of me. For example, it is now 4 p.m. and to-day I have had to teach classes in geometry and algebra; take care of three disciplinary cases; check out supplies to teachers; take care of a complaint sent by the parents of one of our grade pupils; listen to a representative of a book company; answer your questionnaire and my mail; telephone the school board members about the meeting to be held to-morrow night; confer with our coach on the arrangements for Saturday's game; check the attendance and reports, and perform other school duties around town. Tonight I must attend a community meeting and to-morrow night a school board meeting."

Fundamental Principles of Timesaving

To correct the conditions revealed by the survey it would be necessary to apply certain fundamental principles, namely: a proper organization and division of labor between the managing and supervising personnel of the school system—teachers should be functional officers in certain tasks; a careful differentiation and classification of routine tasks from the important administrative functions; the proper determination and utilization of mechanical aids and timesaving devices; the pro-

vision for harmony of mood in the school personnel, right mental attitudes and a desire to accomplish the projects and goals of the school.

In handling routine work the human factor is an important consideration. The support of men and women on whom the superintendent can rely is a valuable essential in a smoothly running school system. Proper organization and delegation of responsibility and authority are necessary. The appointment of committees or individuals to sponsor various activities and the organization of the school system so as to delegate a fair share of responsibility to each instructor as well as to the heads of departments help immensely in taking care of the details and routine activities. In the beginning careful planning of the duties and activities to be delegated is necessary as is care in the selection of individuals who can successfully shoulder responsibility.

How This Method Improves Morale

The careful delegation of authority and responsibility to the school personnel not only gives the superintendent time to plan for the future of the school system but it also builds up a splendid morale within the school organization. Teachers and principals who are given the opportunity to make decisions and solve problems on their own account develop enthusiasm and loyalty that can be obtained in no other way.

As far as possible, every part of a school day should be planned in advance. There should be a fixed time for distribution of supplies, inspection of buildings, conferences with teachers and pupils, examination of the mail, correspondence, supervision of instruction and other administrative activities. In order to know how the time is to be distributed many superintendents keep a record of the time spent over a period of several weeks in the performance of routine tasks as well as of major duties.

used. It must be followed and used to stimulate not only the superintendent but others who are cooperating in administering and supervising the schools. It is not always an easy task to measure up to the different elements of the schedule and to allot a fair share of the time to each activity. Some superintendents make it a point to see all callers. Others say that to do so is a waste of time because it overemphasizes one phase of a superintendent's activities. It must be remembered, however, that only by personal contact with pupils, parents, teachers and officials is a superintendent able to get a view of public opinion and human nature that enables him to sense the real issues that must be considered in the formation of the school's major policies. It is readily understood that if there is no control or guidance of these interviews they will be given more than a fair share of the limited school day.

The Best Ways to Handle Callers

How can overemphasis of details be avoided? One superintendent keeps a desk calendar upon which he lists all of his appointments, carefully noting the time of arrival and departure of the caller. This shows how much time is taken up by callers. All appointments and events are listed and checked. These daily sheets later serve as records. It is necessary in conducting interviews to know how to distinguish between kindness and weakness, never refusing to listen or to do a good turn until all the facts upon which to make a sound decision are known but at the same time refusing to be a dupe.

It is well to give some attention to gathering the extra fragments of time during the day and using them to the best advantage. One superintendent said he always welcomed these intervals between activities because it gave him time to think. Another executive stated that he organized the intervals in such a way as to handle his correspondence between calls. Still another said that some of his most successful plans and decisions were made after the regular working day, and that the brief intervals between activities gave him an opportunity to jot down a few facts that gave direction to plans and policies.

If the superintendent's work is to go forward on time it is likewise necessary that he expedite work by having it planned when the time for action is at hand. A few minutes for dictation will be of little value if he has not thought out his response and finds it necessary to fumble about for an idea to dictate in answer to a letter. Next to the lack of order, the most fatal way of wasting time is to hesitate before acting. Little time is saved when it is necessary to start dictating a letter three or

four times before the line of thought can be carried to completion. One superintendent takes thirty minutes for a task upon which another will spend hours. Why? Because when the time arrives for dictation the first superintendent has before him all of the information necessary, and above all,

DAILY AND WEEKLY PROGRAM OF WORK OF A SUPERINTENDENT IN A SMALL SCHOOL SYSTEM

<i>Daily Activities and Duties</i>	<i>Time Allotments</i>	<i>Special and Periodical Activities</i>
Inspection of building equipment and grounds	7:30- 8:00	
Office — examine mail, arrangement for tasks and duties of office and pupil help	8:00- 8:30	
Conferences with teachers and pupils to put into action daily plans	8:30- 9:00	
Supervision of instruction	9:00-10:00	
Teaching or supervision	10:00-10:45	
Conferences with pupils and visitors	10:45-11:15	
Dictation and supervision of office activities and pupil help	11:15-12:00	
NOON	12:00- 1:00	
Administrative conferences	1:00- 1:15	
Supervision of instruction (Monday, Wednesday, Friday)	1:15- 3:30	Tuesdays and Thursdays reserved for planning and formulating policies and programs or solution of important problems
Dictation, examining teacher reports and sending out bulletins or circulars to teachers	3:30- 4:00	
Conferences — pupils and parents (Monday, Wednesday, Friday)	4:00- 5:00	Tuesdays and Thursdays reserved for staff and department meetings
Planning period — lay out work for next day	5:00- 5:30	
	5:30- 6:00	
	Evening	

since he has a definite notion of the organization of the letter about to be dictated, he concentrates on how to dictate rather than on what he is to say. On the margin of each letter there are a few pencil marks or notes that mean a rapid weighing of the pros and cons—and he is ready to dictate without hesitation. Furthermore, by previous arrangement, he has a regular time for dictation, free from distraction, so that he can finish dictating once he has started.

Concentration must be cultivated by the executive if his work is to go forward effectively. There are so many matters of interest to attract the attention of the executive that it is difficult to get the most important and worth while things done. It

becomes necessary for the superintendent to train himself to fix his attention exclusively upon the matter at hand before turning to the next problem. It is likewise desirable to be systematic and to devote certain periods of the week to the solution of important problems without any interruption from routine detail. To accomplish lasting results, therefore, superintendents must carefully work out their schedules and weigh scrupulously the order of precedence that should be allotted to the projects with reference to both daily schedules and to the more remote objectives.

Order eliminates confusion and saves time, but we must be sure that we do not mistake tidiness for order. The working desk may look well arranged but underneath the surface may be found reports, bills, correspondence and a mass of detail. The time it takes to find the desired letter, the needed report or the important note is the test of order in the superintendent's office. A bench in the hall strewn with things that have to go out or memorandums on the desk may look untidy, but they may mean order.

Tools and mechanical devices used in doing routine work and in finding time for major duties in administration and supervision offer the same advantages to superintendents in small school systems as they do to the workman. Through them the user may increase the quality of his work and eliminate waste of time and effort. Harry Tyler, dean, Sacramento Junior College, Sacramento, Calif., while a graduate student at the University of Nebraska, made a study of the timesaving and labor-saving aids in the offices of small town superintendents. Suggested lists for small school systems were then set up. One list will suffice in making clear the types of aids reported in the study:

I. Aids and devices for use in the business management of the school system

A. Office assistance for the superintendent

1. Full-time paid secretary who may also be secretary of the board of education
2. Provision for pupils to do clerical or stenographic work
3. Delegation of administrative work to principals, teachers and teacher committees
4. Monthly message system and pupil guide service

B. Clerical and mechanical aids and devices

1. At least one typewriter
2. Mimeograph or multigraph
3. Adding machine
4. Filing cases: for correspondence; for records and reports; for results of experimentation and research.

5. Vault or good safe

6. Telephone with provision for someone other than the superintendent to answer
7. Printed or mimeographed teachers' directory

8. Pay roll ledger

C. Other aids in business management

1. Waiting room for callers
2. Private office for superintendent
3. The following wall equipment: large map of school district; mail boxes for principals and teachers; calendar of school and community events; bulletin boards for teachers and pupils

D. Aids for cooperation between superintendent and board of education

1. Superintendent's monthly report, which should be typed
 - a. It should contain: financial statement; attendance and enrollment statistics; report on general condition of school; recommendations.
 - b. Report should be on file in office
 - c. Every member of board should be given copy of report

2. Superintendent's annual report in sections should be either mimeographed, printed, or typed

3. The records of the board of education should be kept in the superintendent's office or made available for his use

E. Aids in handling school supplies and textbooks

1. School supply room managed under direction of superintendent
2. Supplies checked out to teachers and records kept
3. Office file of textbooks in use
4. Inventory of books and supplies on hand (self-checking system)
5. A record of supplies purchased

F. Aids in internal accounting

1. Record of the pupil activities should be kept in the office
2. The superintendent or principal should be in charge of the funds either directly or indirectly

G. Other aids and devices: bookcases; paper cutter; stapler; stationery cabinet; worktable or desks for assistants; work "organizer"

II. Suggested list of aids for supervision of instruction

A. Aids for assisting teachers

1. File folder for each teacher containing all information about the teacher

2. List of approved substitutes
 3. Professional library for teachers
 4. Superintendent's bulletins, which should be mimeographed and issued when needed, and teachers provided with a method of filing
 5. Professional magazines for teachers
 6. Teachers' meetings, held either regularly or irregularly, for the purpose of improving teachers in service, improving instruction or revising the curriculum.
 7. Schedules for intervisitation
- B. Records and reports
1. Cumulative age-grade chart
 2. Report of attendance officers
 3. Report from principals
 4. Permanent continuing census card
 5. Enrollment cards
 6. Permanent record
 7. Current record
 8. Record of participation in extra-curricular activities
 9. Record of physical or medical examinations
 10. Record of intelligence scores
 11. Record of achievement scores

There are also many intangible characteristics that might in a sense be called subjective tools, which have as their purpose the development of teacher and pupil cooperation and the minimizing of friction caused by misunderstanding and emotional reactions.

The enumeration of a few of these characteristics will make clear the nature of this class of tools. Elements of enthusiasm and cheerfulness are contagious and stimulate the whole school personnel. Consistency and calmness on the part of the superintendent do much to steady and stabilize the teachers, especially in times of stress. Simplicity and frankness always bring large returns in time economy because when the administrator is frank it encourages the same trait in teachers and pupils. Kindness, friendliness, yet firmness are qualities that develop confidence and put everyone at ease, at the same time stimulating loyalty. These traits as well as others spur the members of the school personnel to put forth their best efforts. Time is saved, waste is eliminated and good will prevails.

It has been pointed out that the superintendent of a small school system is called upon to busy himself with many kinds of activity. In fact, a list of his duties and responsibilities shows that a busy superintendent is always in danger of becoming a "Jack of all trades and master of none." His hope lies in a careful diagnosis of his problems and in the application of the principles outlined here. No

claim is made that the devices, aids and suggestions described constitute a complete list.

It is hoped that this article will serve to impress superintendents of small school systems with the importance of careful organization and proper delegation of responsibility and authority, of well planned and carefully followed schedules, of the great need for mechanical and timesaving devices that eliminate waste and of the right mental attitudes on the part of the whole school personnel and, finally, with the necessity of continually seeking for more intelligent and efficient means of getting their work done.

How Educators Are Reacting to the Plan for Calendar Revision

During the past year, the University Association for the Study of Calendar Reform has been engaged in making an impartial study of certain problems pertaining to calendar revision. According to Charles Clayton Wylie, associate professor in astronomy, University of Iowa, secretary-treasurer of the association, during the past summer the association canvassed by means of questionnaires representative groups in the United States including bankers, railroad officials and educators. More than a thousand replies were received, 192 from railroad and transportation officials, 573 from bank and trust company officials and 300 from university and college professors.

The University Association for the Study of Calendar Reform has a membership representing more than fifty American universities and colleges, including Chicago, Illinois, Iowa, Northwestern, Columbia, Harvard, Princeton, Yale, California, Stanford, Washington, and other such institutions.

Of the 300 replies received to the questionnaire from university and college professors, a strong majority favor calendar reform; and, as with the other groups, there is a decided preference for the twelve-month plan. The percentages are as follows: educators favoring calendar reform, 91 per cent; educators opposing calendar reform, 7 per cent; educators favoring thirteen-month revision, 31 per cent; educators favoring twelve-month revision, 62 per cent.

The questionnaires revealed the bankers to be the most conservative and university professors the least conservative of the three groups. A majority favor revision of the calendar, and there is a strong preference for a revised twelve-month rather than the thirteen-month plan.

The three questionnaires were similar in form, each including information summarized from the League of Nations report.

Individualizing Instruction in the Rural School

By F. E. LORD, Department of Teacher Training, Michigan State Normal College, Ypsilanti

This department of rural education is conducted by Helen Heffernan, chief, division of rural education, state department of education for California, Sacramento.

“THEY grind the rural teacher’s time to dust,” was Horace Mann’s unique method of characterizing the organization of the rural schools in 1837. Since that date the rural curriculum has more than doubled, thereby increasing the teaching load. The organization and method of conducting a country school are to-day far more traditional than one might expect. In some quarters these schools are rapidly passing; in others they will continue to exist for years. It is imperative that reorganization be introduced to make possible more efficient instruction than is

now practiced. Let us review briefly the organization of a country school and then suggest some desirable reorganization to replace it.

A survey of the organization and teaching in a typical rural school to-day would reveal a situation somewhat as follows: Since the seventies the rural school has been a graded school. The present organization is patterned much like the traditional elementary school under the 8-4 plan. The common practice is to have eight grades. In such states as Michigan, however, where the school age begins at five years, it is a common practice to have a be-



Pupil testing and small group activities are part of the individualized spelling class at Hagen School.

ginning or chart class in addition to the first grade. In this case the teacher deals with her flock in nine groups.

For some time I have been interested in counting the number of recitations listed on the daily schedules posted in country schoolhouses. It is interest-

DAILY RECITATION BY GRADES IN A ONE-TEACHER SCHOOL IN SOUTHERN MICHIGAN

Grade	Pupils	Number of Daily Recitations	
1	3	4	1*
2	3	4	
3	2	3	
4	2	3	2
5	2	5	
6	6	6	1
7	1	9	
8	4	7	
	23	46	

*Indicates that first and second grades are combined for one additional class.

ing to note that the number of recitations varies from fourteen to forty-nine. It seems to be a common practice in some localities to follow rather closely the suggested program in our state courses of study, in which case the number of daily recitations totals over thirty. One of the most extreme cases of a highly organized daily schedule is shown in the accompanying table, which was made from data presented on the schedule.

Efficient teaching of thirty classes a day would be impossible even if homogeneity in ability were found in the class. Striking individual differences are likely to be found within a grade of as few as three or four members. "Grade per year" promotion is followed and acceleration is seldom practiced; consequently there is great disparity of ability within a single grade. Several illustrations will indicate the seriousness of the problem.

The average reading grade for a third grade class determined by three carefully administered standardized tests revealed a range in ability from a grade of 2.0 to a grade of 6.1.

A second illustration is taken from a second grade of three pupils who in the spring had reading grade ability of 2.4, 2.0 and 3.5. In this case the norm was 2.9.

Variation in intelligence is illustrated by two eighth grade pupils, one of whom had an I. Q. of 93 and the other of 130.

It is a common practice for the rural curriculum to be composed of approximately ten subjects. There is a tendency on the part of a few progressive teachers to correlate such subjects as language and health, or geography and history. However,

correlation does not reduce the number sufficiently to make possible efficient instruction.

In addition to the fact that the rural teacher attempts to instruct eight or nine grades, following a curriculum of ten or more subjects, she is confronted with numerous other responsibilities. I found upon tabulation that the interruptions in a day's work numbered more than seventy-five. These interruptions were serious enough to occupy the time and thought of the teacher and to take her attention away from her regular class work.

Through the cooperation of teachers in the field I have been able to secure several records of the daily activities of country school teachers.

These records are suggestive of the types of responsibilities carried in addition to teaching. A part of one of the records follows: Monday: un-

HAGEN SCHOOL DAILY SCHEDULE*

9:00	Health	Inspection or discussion
9:10	Geography 4 (a)	Group
9:20	Reading 1	Individual
9:30	Reading 2	Individual
9:45	Geography 6	Group
9:55	Geography 5	Group
10:05	Geography 7	Group
10:15	Agriculture 8	Group
10:30	Recess	
10:45	Music (lower)	Individual
10:55	Arithmetic	Individual
11:30	Speed Tests	
	Arithmetic (4-7)	Individual
11:40	Spelling	
12:00	Noon	
1:00	Language 1 and 2	Group
1:10	Language 4	Individual
1:20	Language 5 and 6	Individual
1:30	Language 7 and 8	Group
1:40	Word drill 1	Group
1:45	Reading 1-6	Individual
	History 7 and 8	Unit study—class when necessary
2:30	Recess	
2:45	Music (4-7)	
3:00	Penmanship	Individual
3:15	Special activities	
Monday—Book reports and reviews		
Tuesday—Art		
Wednesday—News for school page		
Thursday—Study of some story		
Current events; Art		
Friday—Civic league or sewing		

*Arranged by Shirley Suma, teacher.

locked door; opened blinds; built fire; carried wood and coal; swept floor; corrected papers; helped children decorate school for a party; rang last bell; took the roll; passed out papers; answered three questions; explained two problems; opening exercises; heard beginning reading; answered one question; heard first reading; heard third reading; heard fourth reading; heard fifth reading; dis-

missed little children; heard seventh arithmetic; heard eighth arithmetic; dismissed rest of children for recess.

There are several interesting things about the record besides the extra responsibilities of the teacher. Note, for example, that there is a reading class for the beginners as well as for the first grade. This means that the school has a nine-grade organization. Not all grades, however, are represented. It is also interesting to note that classes are not taught but are heard. This terminology is a familiar one which accompanies the formal recitation type of procedure.

Several attempts have been made to reorganize instruction in the small rural school. For example, it has been a practice in some states to recommend

DIXBORO SCHOOL DAILY SCHEDULE*

9:00- 9:10	Opening exercises	
9:10-10:30	Reading (Tuesday-Music) 3, 4, 5, 6	Individual
	1 and 2 read till 10:00 (Work books)	
10:00-10:15	7th History	Group
10:15-10:30	8th History	Group
	Recess	
10:45-11:00	All—Number games	Individual
11:00-11:30	All—Arithmetic—Practice—Speed	Individual
11:30-12:00	All—Spelling	Individual
	Noon	
1:00- 1:20	Primary reading	Individual
1:00- 2:30	Language and activity work	Group and individual
	Recess	
2:45- 3:00	5th Geography	Group
3:00- 3:15	4th Geography	Group
3:15- 3:40	7th Geography	Group
3:40- 4:00	8th Agriculture and civics	Group

*Schedule arranged by Helen Anderson, teacher. Only occasional formal work is given in penmanship.

alternation of subjects from year to year. In other cases a combination of classes has accompanied alternation. Illinois has attempted a so-called plan of directed (supervised) study and individual instruction.¹ This plan really provides for helping the children during study and coaching them when they need help. The essence of individual instruction—the use of self-instructive and self-corrective materials and provision for progress according to individual rates of growth—is not included in the plan. A far more complete plan for individual work is reported by Brown, in which provision is made for the use of self-instructive and self-corrective materials. The proposed plan that follows may be considered an extension of his work.²

¹Twenty-Fourth Year Book, National Society for Study of Education, Part 2, p. 117.

²Ibid, p. 122.

Dunn and Everett have reported a significant experiment in instructional reorganization of the country school.¹ They have attempted curricular reorganization as well as the introduction of modern methods such as the project method and individual instruction. The experiment promises to be one of the most fruitful that has been undertaken thus far.

Schedule Can Be Reorganized

I am proposing a number of simple reorganization procedures that any country teacher might effect, as well as a more fundamental plan of reorganization that might be undertaken by those who are enterprising. Let us first enumerate some simple changes or practices that might be introduced without seriously disrupting some of the so-called sacred traditions.

1. A daily schedule might provide a fifteen or a twenty-minute period during each half-day as a time in which children falling behind the grade group or experiencing temporary difficulties might be helped. While this amount of time is comparatively short, sufficient guidance might be provided to help considerably. Of course such a practice is only an expedient until other reorganization might be effected that would eliminate the need for a special coaching period.

2. The child in the rural school is forced by the nature of circumstances to do a great deal of independent study. Efficiency in independent study may be increased by the improvement of study habits. Unfortunately most teachers are not sufficiently skilled in supervision of study to aid the child in the improvement of study habits.

3. It seems entirely feasible to group children according to ability and to reduce the number of classes, in reading, for example, from seven to four. The same practice can be followed in spelling and arithmetic. The grouping should be done on the basis of carefully administered standardized tests.

4. Most rural teachers could practice far more correlation of subjects than they do without decreasing the effectiveness of the school. We need more correlation of health work with oral and written language, of silent reading with study of the content subjects and of writing with all written work of the school. If proper writing habits are encouraged in all written work, one formal period of drill per week should be sufficient to provide necessary technical information relative to correct writing. There seems to be a possibility for more correlation between history and geography. There are, however, no adequate materials available for such correlation.

¹Dunn and Everett, *Four Years in a Country School*, Bureau of Publications, Teachers College, Columbia University.



Each child is drilled according to his needs in the individualized arithmetic class at Dixboro School.

5. I have been experimenting with the application of individualized instruction in country schools. Several schools have been encouraged to introduce self-instructive and self-corrective materials in reading, spelling, arithmetic, writing, the formal side of language, and in some cases in the factual side of social studies. The work in the content subjects, health, geography, history and others is carried on as group instruction. However, the groups or classes are combined, when possible, to increase the size of the group and to reduce the number of recitations. The group work is made as informal as possible through socialized recitations and project work.

The daily schedule of a school reorganized according to the plan just described is strikingly different from that of the traditional schedule. Two typical programs are reproduced here—one from the Hagen School and another from the Dixboro School.

Because the Hagen School uses a single cycle text in geography, a combination of grades cannot be followed easily since a study of advanced units of the cycle depends upon mastery of the previous units.

The special activities work that takes place during the last forty-five minutes of the day is one of the most interesting features of this program. In actual practice, however, the activities pursued

during the period are far more flexible than the program indicates. For the most part work is centered around the individual interests of the children. In substance, this period is merely a portion of the day reserved for the children to have an opportunity to carry on some creative work and to work together in activities that by their nature require participation of all or most of the children.

A program much more simple in organization is illustrated by the Dixboro schedule.

The fact that the Dixboro School does not have a sixth grade reduces the number of classes by three or four. When the work is individualized, as in arithmetic, the children of the entire school are at work simultaneously on the same subject. Each child is working on material adjusted to his level of achievement. His materials are for the most part self-instructive and self-corrective, and he is allowed to progress at his own rate. There is no attempt to keep the children together in grade groups. Complete mastery of one unit of subject matter is insisted upon before the next unit is started. Since the materials are self-instructive and self-corrective, maximum opportunity is provided for developing powers of self-direction and self-appraisal. The traditional school centers its attention solely on mastery of subject matter and neglects the development of initiative.

The principal advantages of reorganizing the

rural school for the purpose of individualizing instruction may be summarized as follows:

1. The number of daily class periods is greatly reduced, thus making possible a schedule of work that can be easily carried out by the teacher.

2. The complications arising as a result of group instruction in classes made up of children of great variation in ability are practically eliminated.

3. Provision is made for the exercise of powers of self-direction, self-control and self-appraisal.

4. Failure and lagging behind due to irregular attendance are lessened. If a child is putting forth his best effort he is succeeding. If he is absent from school for a period of time he falls behind his own budget of time but not behind his class.

5. According to the testimony of the children, the reorganized school provides a happier situation in which to work.

The plan is by no means perfect. Further experimentation is needed for refinement of the organization and solution of certain problems that arise as a result of the many changes the plan necessitates. It is but fair to say that the plan works successfully and certainly provides for a method of school organization that approximates the ideal.

The Sunday Lady of Possum Trot— An Epic of Faith and Work

"Where arms had failed, eloquence stayed the hand of Sherman on his march to the sea, and saved the Berry homestead in Georgia."

This is the way the *Literary Digest* of September 5, 1931, begins its story of the Berry School in Georgia, a story of vision, of faith and of hard work on the part of Martha Berry, a soft voiced daughter of the South, who has educated more than 7,000 boys and girls of the mountains of north Georgia. The story continues:

"It was fortunate that a crow, following over the wide swath cut by Sherman, could find rations in this one spot at least, for here was born Martha Berry, who has made an army with the Lord and raised 7,000 of His mountain 'chillun' in the ways of faith and civilization.

"She had something in addition to her father's eloquence. She had eyes to see and ears to hear the crying need in the mountain 'hollers' all about her. She saw it all, one day, when she and Roanie, her pet horse, were out for a ride—log cabins, corn pone and bacon, men and women old before their time, and little children scratching hard land for a living. Only that they had, and their pride.

"It's a long story about this Southern belle and her vision. A little of it must suffice here.

"In a little log cabin across the road from the

big house she started a Sunday school with ten little children whom she had persuaded to come out of the mountains. She taught them about Adam and Eve, Noah and the Ark, Jesus, and the infinite power of God Who still loved them, though they were hidden in the hollows where the shadows came early and stayed late. Perhaps she was a good angel sent by God—anyway, they called her the Sunday Lady of Possum Trot.

Helping the Seeds to Grow

"That was the beginning for these people of the mountains, of whom President Wilson said: 'They are seed pods, stored away for the day when their country needs them.'

"Miss Berry opened the pods. She gave the land on which the school started, and her family lawyer, who advised against it, became one of the first trustees. The property has now been increased to nearly 20,000 acres, which, with the buildings, is valued at several million dollars, and a thousand students are enrolled annually. They pay for their tuition by their labor, and Miss Berry's compensation is beyond price.

"She raises more than \$150,000 annually to pay the running expenses of the schools.

"A whole self-sustaining city has been built on that woodland farm. A mill has been built that grinds the meal for the best corn bread in the world. School buildings of granite from the hills—granite the tawny shade of buckwheat honey—cling to the hillside, dormitories, and recitation rooms.

"Down in the shops, the boys make lovely rustic furniture and reproductions of the priceless antique mahogany in Miss Berry's old home. They even raise flax for the hand woven towels that rival the Italian for delicacy and smoothness. There is an automobile repair shop, where the boys repair and keep in order the trucks and tractors used in farm work—a bakery, from which more than one Berry graduate goes out to become famous—and a shoe repair shop.

"Ida Tarbell has listed Miss Berry among the fifty greatest women in America. The Georgia Legislature has voted her the title of 'Distinguished Citizen'; in 1925 President Coolidge gave her the Roosevelt medal for distinguished social service; the University of Georgia has awarded her the honorary degree of Doctor of Pedagogy; she has received the degree of Doctor of Laws from the University of North Carolina for her work for the South, and the *Pictorial Review* annual award of \$5,000 for distinguished service was awarded to Miss Berry in 1927.

"But to the 'chillun' of the 'hollers' she is still the Sunday Lady of Possum Trot."

How to Plan a Satisfactory Window Washing Schedule

This article, the last of a series, discusses window and other miscellaneous cleaning in the school and describes the best methods and appliances to be used

By CHARLES E. REEVES, Elmira College, Elmira, N. Y.

WINDOWS constitute the largest part of the glass area in school buildings. Window cleaning is important from the standpoints of the admittance of light to classrooms and the improvement of the appearance of school buildings. Dirty windows give a school building an unkempt appearance. Attention is always directed to the light so that the condition of the windows is conspicuous.

Although the cleaning of window and other glass is important, it seems that such work is greatly neglected by school janitors. The practice seems to be to clean windows about two or three times a year. This is not sufficient to keep the glass clean. A survey of the opinions of building principals in the city of Chicago¹ showed that the majority of principals felt that the windows in their buildings should be cleaned more frequently. Their suggestions follow: satisfied with the cleaning of windows five times a year, 120; six times a year suggested, 1; eight times a year suggested, 2; every six weeks suggested, 3; monthly suggested, 145; every three weeks suggested, 2; every two weeks suggested, 8; weekly suggested, 5; indefinite suggestions, 13.

Planning the Cleaning Program

Windows of most school buildings, except at times soon after they have been cleaned, usually indicate that they are not cleaned often enough. Often the dirt shows so plainly on the glass that no test need be made. The amount of dirt on window glass may be revealed if the observer will rub a white cloth on either side of the window and note the condition of the cloth and glass.

The person who plans a yearly program of window washing should take into account the facts that windows usually become dirty on the inside sooner than on the outside and that it is easier to

wash the inside surface of the glass than the outside surface. The inside glass surface, therefore, should be washed oftener than the outside.

Washing the windows on the outside three times a year, during vacation periods, and once a month on the inside should be sufficient to keep them clean in most localities. At any rate such a program would give windows more frequent cleanings than they usually receive.

The Best Time for Doing the Work

If the inside surface of windows is to be washed once a month, it will be necessary to wash them during school terms a part of the time. It is difficult to find a time to do this work when the rooms are not in use. Windows in the corridors and stairs may be washed at any time when school is in session, and windows in special rooms may be washed when classes are not using the rooms. In some schools janitors are permitted to wash the inside glass of the windows in the classrooms while classes are in session, but this practice may have a disturbing effect on the work of the pupils.

The Civil Service Commission of Chicago asked principals whether windows were washed in their buildings during school hours. The answers were: yes, 28; no, 181; sometimes, 38. Forty-four other principals answered that the glass of some windows was washed during school hours. Such glass was specified as the windows of corridors, stairs, basements, transoms, assembly halls, offices and vacant rooms.

It is probably better for the janitor to arrange to wash the windows of two or three rooms each noon hour or on Saturdays until the work has been completed.

The glass in classroom doors is particularly likely to have finger marks left by children in pushing the doors as they enter or leave the rooms. Such glass should be washed daily. The glass of cases and cupboards and mirrors should

¹Civil Service Commission, Chicago, Report on the Investigation of Janitor Service, p. 70.

be washed daily or weekly, depending upon how quickly finger marks accumulate on the glass. The glass of transoms, electric light globes and bulbs and pictures should be washed three times a year at vacation periods.

Large panes of glass may be more thoroughly and rapidly cleaned than small ones. The difference in time required to wash panes of different sizes may be as great as 100 per cent, depending upon the sizes of the panes. The difference in the thoroughness of cleaning and the time required is due to the difference in the length of the strokes taken in the cleaning process and the difference in the number of corners to be cleaned. The window panes of buildings should, therefore, be as large as practicable.

Effective Cleansing Materials

Windows may be cleaned more rapidly on the inside than on the outside since more time is required to adjust window platforms and window straps and to climb through the windows to wash the outside glass. Some types of reversible windows have many cleaning advantages in that both sides may be washed from the inside.

The best appliances to use are a cheesecloth with which to wash the windows clean and a chamois with which to dry them. Used in reverse order these appliances are unsatisfactory. A chamois is not as satisfactory for washing windows as a cloth, and a cloth does not dry them as satisfactorily as does a chamois. The chamois adheres to the glass more closely than the cloth and, therefore, does not remove the dirt so readily. The cloth used as a drying appliance soon becomes damp and thus makes drying difficult. It also leaves lint on the glass. A sponge may be substituted for the cheesecloth for the washing process, but there is no advantage in this and there may be a tendency to apply too much water so that it will run from the window to the woodwork.

Window brushes and squeegees are not effective for the cleaning of school building windows because they require the application of much water which is bound to splash on and run down to the woodwork and injure it. If only one appliance, a chamois, is used both for washing and drying, it soon becomes so dirty that windows are left in a streaked condition.

Clear warm water, or warm water containing a small amount of ammonia, kerosene or alcohol, should be used for washing windows. A powder mixed to a paste is sometimes spread on windows, allowed to dry and then wiped off. This is a good means of cleansing and polishing the glass and requires about the same amount of time as does the washing process, but it is disagreeable to use, it is

likely to leave white marks on the casement, it is difficult to remove from corners of the panes and it leaves a fine dust in the air when it is wiped off. If such a powder is used, it should be applied as a thin coat and kept away from corners.

Putty that has become so dry and hard that it adheres closely to the window glass or sash may be removed if nitric acid is applied freely to it with a feather. After a few minutes it may be removed with a putty knife.

Glass should be washed and dried with systematic back and forth or up and down motions. Circular motions over the glass are unnecessary and require more time than systematic motions. The great need in school buildings is for clean, not polished, glass. For this reason janitors should wash glass more frequently and spend less time in polishing it.

Observations that were made concerning the average time required by janitors who used the back and forth method of procedure showed it to be 8.8 seconds for each square foot of glass. The average time required by one janitor who used the up and down motion was 4.2 seconds a square foot. The average time required by janitors who used the circular motion was 17 seconds a square foot. These observations would tend to show that the up and down motions may be more rapid than the others. However, the work was performed by various janitors, the panes of glass were not of equal size or dimensions and different appliances and agents were sometimes used, so that the differences were not all due to the methods of procedure. The one janitor who used the up and down motion was a rapid workman and was cleaning large panes of glass.

In experiments that were made, under controlled conditions, the back and forth motions proved to be slightly more rapid than the up and down motions, and the circular motions required considerably more time than either of these methods.

Handling the Miscellaneous Jobs

There are many miscellaneous cleaning jobs that janitors are sometimes required to perform. Some of these require infrequent attention. Some may be performed irregularly and at odd times. Some are not necessary in some buildings, but are essential in others. Some of these miscellaneous cleaning jobs are important and must not be neglected, while others are unimportant, so that, whether or not they are performed, will depend upon the amount of janitorial service available for a particular building and the degree that such service is affected by esthetic standards.

Buildings vary greatly in the number of metal

fixtures and the amount of inside metal work they contain. Brass, nickel, copper and steel metal fixtures must be kept bright, for appearance sake. Some of this metal, such as that on doors and windows, electric switch plates, water faucets and toilet room pipes is conspicuous.

There are many school buildings in which metal is never polished. When sufficient assistance is available, however, janitors consider this an extremely important job. In entering a building a casual visitor may not notice the fact that metal fixtures are not polished, but if they are well polished, they are conspicuous and give to the building an appearance of good and efficient care. Well polished brass is noticeable, but one naturally thinks of it as about the last job that janitors perform.

Polishing Metal Fixtures

The polishing of metal is a job, the frequency of which will depend upon the opinions of those having the matter to decide. Metal can be polished more easily if it has been kept untarnished. The polishing of metal is work that can be performed at odd times because it is never pressing. Most of this work can be performed during school hours. All metal in toilet rooms, the furnace room, corridors, special rooms and even on the doors of the classrooms may be polished during school hours. Only the metal in the classrooms will have to be left for polishing outside of school hours.

A good liquid or paste metal polish should be used for polishing brass or other metal. Cleaning powders will not remove tarnish. Wiping the polished metal with an oiled cloth upon the completion of the process will help prevent tarnish. Polish should be applied with a soft cotton cloth and the polishing done with a soft woolen cloth.

Porcelain, such as drinking fountains, lavatories and sinks, should be cleaned daily when the school buildings are in use. These should be washed with a strong cleanser. Two methods of cleaning porcelain are in use: The dry powder is sprinkled on the porcelain to be cleaned and the porcelain is rubbed with a damp cheesecloth after which it is rinsed with clear, hot water; a strong solution of the cleansing powder in hot water is used to wash the porcelain pieces, the cleanser is applied with a brush, sponge or cloth, after which the porcelain is rinsed with clear, hot water.

Iron rust may be removed from porcelain by the application of muriatic acid in water or by the use of a strong solution of cyanide of potash, of phosphoric acid or of oxalic acid. It may also be removed from furniture by similar means. Grease may be removed from porcelain by the application of kerosene or gasoline.

Glazed bricks on inside walls or fireplaces may be cleaned by washing them with a strong solution of any standard cleanser, or by washing them with kerosene. Washing them with a solution of muriatic acid will brighten them.

Chewing gum may be removed by scraping the part with a broad bladed knife. This should be done as soon as the chewing gum is discovered adhering to the furniture or to floors. Pencil and chalk marks should also be removed from walls and fences with a damp cloth.

In the cleaning of toilet bowls, urinals, drinking fountains, door knobs, desk tops and hand rails, janitors may add disinfectant to the water used for this purpose. The usual requirement is that such parts shall be disinfected weekly. No extra work is involved, other than the regular cleaning, since the disinfectant is added to the cleaning solution.

The rugs and carpets in the offices and in the teachers' rest rooms and the door mats should be kept clean. This work can best be performed by vacuum. If no central vacuum cleaner has been installed, the janitor should be provided with an inexpensive portable cleaner.

Inkwells should be cleaned three times a year at vacation periods. They should be removed from desks, placed in pails under running water and finally brushed individually in water.

Waste paper and sawdust should be disposed of by burning in a chimney flue. If none is available they may be burned in a wire burner or in a furnace, although the two latter methods of disposal have certain disadvantages. Old print type, iron filings and metal waste may be disposed of directly with the ashes. Garbage should be placed in cans with tightly fitting covers and disposed of daily. Garbage cans should be kept clean by scrubbing.

Government Education Volumes Now Available

The scope of the activities of the Federal Government in relation to education is brought out in a list of more than 1,100 separate studies, varying from intricate details of finance to the functions of janitors, just published by the Office of Education.

The publications on educational matters refer only to those that are available at the Government Printing Office from which they can be purchased at a nominal cost.

There are more than 250 subclassifications which cover practically every branch of the educational field. The catalogue can be obtained without cost from the Office of Education.

Editorials

Economies in Higher Education

LEGISLATORS and governors have served notice upon administrative officers in higher institutions to the effect that higher education must be carried forward more economically henceforth than has been done during the past two decades. Anticipating an era of curtailment of appropriations for higher institutions, investigators are at work in a number of colleges and universities in the effort to determine whether instruction can be conducted with less expense than at present, but with as great efficiency. Reports of investigations have not yet been published extensively, but several of the investigators have made statements concerning feasible economies.

One investigator, whose results will be published in due course, has apparently shown that students in college progress about as rapidly in the mastery of a subject with a thirty-minute as with a fifty-five-minute class period. The conclusion is advanced tentatively that the cost of conducting classes can be cut in two by adopting methods of instruction in which students spend less time sitting in a classroom with an instructor and more time in working by themselves. A controlled experiment revealed that students progressed at nearly the same rate, as measured by achievement tests, when they spent only thirty minutes in class periods, as when they spent fifty-five minutes.

Another investigator has been at work on the problem of efficiency in instruction in science in which the laboratory plays a large part. He has made the statement that elaborate, expensive provisions for the individual student's work in scientific laboratories are largely wasted. Students master scientific subjects as fully from class demonstration as from individual work in the laboratory. This is a really startling proposition. Higher institutions spent in the past and are still spending enormous amounts of money in providing equipment for individual student experiments in scientific laboratories. If the student can acquire just as good an understanding of a science by witnessing the instructor perform an experiment as by performing it himself, then here is a chance for substantial economy in higher education.

Medical education is more expensive than any other form of higher or professional education. A distinguished medical man who has been investi-

gating instructional work in a medical college has reported that about half of the technical minutiae that are required of students in medical schools are valueless and should be eliminated from the curriculum. He says: "Many of the instructors in medical schools have never actually practiced medicine and they don't know what is and what is not helpful to a doctor. They drill students on a vast amount of detailed matter that is of no practical value to any physician. It would be better for everybody if there was a thorough pruning of the curriculum of medical schools."

Evidently we are on the eve of a thorough overhauling of higher education with a view to eliminating needless costly methods and laboratories. These tentative conclusions are only presented to show the trend in present day investigations. In due course there will be presented the results of extensive and decisive investigations which will lead to material modification in higher institutions, resulting in a marked saving of money.

The Era of National Educational Surveys

THREE great national surveys are in progress at the present time. One concerning secondary education has been under way for two years, one on the training of teachers is well started and one on educational finance has only recently been launched.

William John Cooper, commissioner of education, has been the moving force in initiating the surveys and in obtaining adequate funds to carry them through to completion. Each survey will seek, first of all, to obtain and organize accurate data pertaining to the subject under investigation. Then it is expected that the data will be interpreted and commented on, with reference to what is necessary or desirable in the field of education to which the data pertain. Finally, there will be constructive suggestions designed to point the way to practicable improvement or progress in our educational work.

There has never been in our educational history any educational surveys comparable in extent and thoroughness with the three that are now under way. The former United States Bureau of Education, now the United States Office of Education, devoted its resources pretty largely to gathering and publishing facts bearing upon one or another educational activity in our own or in foreign countries. Practically no effort was made to evaluate the facts gathered and, especially, to propose programs of improvement in order better to meet our

educational needs. Under Commissioner Cooper the Office of Education is playing a more dynamic and constructive rôle than it did formerly. The best educational minds in the country are being utilized to investigate the present situation in different phases of our educational work and then to lay out a course to be pursued in the years ahead, so far as this may be possible.

It may be predicted that when these national surveys are completed and the findings and conclusions are published, we shall have access to dependable educational material such as we have never had before.

A Matter of Ethics, Courtesy and Fair Play

ON THE first of December last, the superintendent of schools in a city of 60,000 discovered that one of the teachers in his junior high school was planning to be married at the end of the first semester, which would leave a vacancy to be filled about the first of February.

The superintendent instructed his clerk to send a notice of the vacancy to the chairman of the appointment committee in a near-by university. The notice stated that applications for this position would be welcomed. The chairman looked over all the candidates on his list and selected one who was eminently qualified to meet the requirements of the position in all respects. She presented her application to the superintendent on the fifth of December. The chairman of the appointment committee sent many credentials supporting the young woman's aspirations for the vacant place. The applicant also mentioned the names of a number of persons who were acquainted with her personally and with her work. The superintendent's clerk sent to each of these persons an information blank requesting data concerning the candidate.

By the tenth of December the superintendent had a lot of information on file regarding the afore-said applicant. In her appeal to the superintendent the young woman stated that she would receive her degree in January and that it would be necessary for her to secure a position as soon as possible because she had contracted obligations during her period of preparation that ought to be discharged without delay. She would be much pleased if the superintendent would let her know at the earliest moment whether or not there was a likelihood that she would be favorably considered for the position.

Time ran on to the fifth of January with no word from the superintendent. The candidate then wrote the superintendent beseeching him to

inform her whether the position had been filled and, if it was still open, whether she would be presented to the board of education for the place. No response came from the superintendent. On the twelfth of January the young woman's adviser took a part in the drama, partly because he knew the young woman was worthy and capable and should have a position and partly because he was interested in the ethics of the situation. Did the superintendent simply ignore the appeals of the candidate because he was indifferent? Did he think he had no obligation to inform an applicant whether or not she might continue to hope for a position?

So the adviser dispatched a note to the superintendent explaining that he (the superintendent) had asked the university to nominate a candidate for the position and in good faith a competent person had been nominated and that this applicant had refused to consider other positions pending a decision at C—. Why, he asked, was it impossible for her to learn what her status was? The superintendent's clerk replied that the position in question had been filled on the thirteenth of December by the promotion of an elementary school teacher. The adviser then addressed the clerk and asked why this information was not sent to the applicant. The clerk replied that it was a policy in C— never to acknowledge applications or to respond to the letters of applicants or to inform them when appointments had been made.

The adviser continued his correspondence with the clerk for the purpose of learning how many candidates made application for the position in question. It was learned that she, following the instructions of the superintendent, had sent a notice of the impending vacancy to half a dozen universities in the surrounding states and had informed two teachers' agencies. The clerk said that it was the policy whenever there was a vacancy to obtain as many candidates as possible in order that the best might be selected and that there were always more candidates than there were positions available. The teachers' agencies were particularly active in urging persons on their lists to make application. Teachers' agencies, some of them, have probably been responsible for developing an unyielding attitude on the part of some superintendents and their clerks; but when a superintendent broadcasts an invitation to universities and teachers' agencies to nominate candidates for a position, there is certainly, according to the most elementary rules of the game, a reciprocal responsibility for the superintendent at least to inform applicants who tell him that they are waiting for his decision that a position has been filled and there will be no place for them.

Educational organizations throughout the country are striving to work out codes of ethics designed to place the relationships of teachers to one another, to their superiors and to the community upon a fair play basis. It may be predicted that so long as superiors treat inferiors as the superintendent in C— treats applicants for a position, it will not be easy to instill in teachers a keen sense of frankness, straightforwardness, loyalty, dependability and good will towards superiors.

One would think that mere sympathy for an applicant who has taken pains to make proper preparations for his work and who is casting about in the world to find a chance to work would lead anyone, even a routine clerk, to advise a candidate not to depend upon a position that has already been filled. Does the educational game harden the human feelings of its practitioners?



The Education of Atypical Children

INCREASING attention is being given to the education of atypical children in the United States, according to Dr. William John Cooper, commissioner of education. He made this statement recently in a letter to the secretary of the interior in commenting upon a survey of special types of schools and classes of this character conducted by the Office of Education. It is disclosed in the survey that 736 cities in the country with a population of over 10,000 now have special classes and schools to reach children who deviate from the normal or the average in mental ability.

That our educational work is complex is emphasized in the survey which states that in order to provide for the needs of atypical children in the public schools it is necessary to maintain the following types of special schools and classes: parental schools; disciplinary schools or classes; schools and classes for subnormal children; trade schools and classes for deviates; industrial schools and classes for elementary pupils; schools and classes for over-age children; schools and classes for non-English speaking children; schools and classes for gifted children; open air classes for the delicate; schools and classes for children with speech defects and defects of vision and for crippled children; classes for the deaf and for children who are hard of hearing; and special classes for the education of children who are afflicted with epilepsy.

How far we have grown away during the last two decades from the practice of providing one type of school for all children in a community and letting the atypicals adjust themselves thereto as best they could!

Should We Abandon the National and State Teachers' Meetings?

THROUGHOUT the country the movement is increasing in momentum to substitute local for general or state teachers' conventions.

An inquiry made of a number of officers of both local and state associations has shown that those who are in favor of local meetings believe that when teachers attend conventions away from home where there are great crowds, they profit little from them. They are distracted by the multitude so that they cannot settle down and study attentively any subject under discussion. One prominent man writes: "My teachers and I compared notes after a recent convention. We all were very much fatigued just by the great throngs of teachers whom we found everywhere. We all responded to the inner urge to run around from one place to another rather than to be composed and get all we could from three or four programs. We tried to sum up what we had brought home from the convention and could produce very little."

There is another side to the story, however. An officer in one of the larger state conventions writes: "The only way one can gain an impression of the way education is going is to participate in meetings in which all his co-workers are expressing their views on current topics. It is not necessary for one to make a speech in order to show on which side he is of an educational question; he can show it by applauding or failing to applaud the views expressed by others. At a great convention a teacher cannot help but feel the drift of educational development."

Without doubt there is a benefit to be derived from a great convention that cannot be derived in equal measure from a small local meeting. The magnitude of the teaching profession—what might be called its grandeur, its dignity, its importance—can be felt only when one participates in a great meeting. On the other hand most of those who attend state and national conventions cannot keep themselves in a studious or even receptive frame of mind when they are rushing from one crowded hall to another. The very massiveness of some of the great conventions overwhelms most persons, so far as keen intellectual reaction upon educational discussion is concerned. But it is possible to get points of view and to feel the trends in education.

For this reason it would be a misfortune if we should abandon state and national conventions and substitute in their stead small local meetings devoted to an intensive discussion of education problems. There is certainly need for the latter, but there is an equal need for the former.

Happy to Say—By WILLIAM McANDREW

WHEN the mayor's manager was planning the two weeks' silver jubilee celebrating the twenty-fifth anniversary of the establishment of Greater New York, I heard him say the school people would be the most trouble and make the poorest show.

THEY were no trouble at all. Frank Rexford, teacher, and the school people drew the largest and most delighted crowds.

ON THE last day I heard the mayor's manager of the jubilee say a schoolmaster is the most impractical of all the people in the world.

I SAID: "I'll collect a hundred dollars for any charity and match it against a like amount put up by you. We'll choose a committee of three who will hear testimony. If you substantiate your claim our money goes to the charity. If you don't, yours does." He laughed it off.

FOLKS are like that. They inherit this fool notion. Evidence makes no dent on their cortexes. They couldn't do a school executive's job without collapse.

FOR years, the peace loving school man said nothing.

THAT isn't the way.

I HEARD a school man in Rochester, Minn., say to a city official: "Sir, you have organs in your head which, if you used them properly, would save you from making silly cracks like that."

IT WAS a woman supervisor who, when a Chicago school board president called a group of school persons who were candidates for reelection, "indolent incompetents and social derelicts," promptly sent a lawyer inviting the president to write an apology or to come to court. She gave the apology to the newspapers; they gave it to the world.

CHARLEY CHADSEY backed the Detroit newspapers off the map after they had slandered the pupils of one of the high schools.

HUMILITY in the case of one's own reputation is, no doubt, at times, the way of dignity and power. But when a whole system, or a group of teachers, or a fellow worker is attacked, get up and defend with a stately and circumstantial punch.

AMERICANS love courage, even in a school teacher. It surprises and delights them.

AMERICANS love a fighter who wastes no strength in shouting, who seeks no notoriety but who is forceful and tenacious.

BUT let a school worker stand up like a man, defend his calling, protect his colleagues, omit references to himself, use strong words with dignity, keep his temper, accept temporary defeat and use its lessons for the next time. Such a one will get the support of the best in town, the affection of many and the respect of all.

I HAVE never seen a book in praise of the school janitor.

WHY don't you write one?

IF YOU didn't have him, his absence would upset you more than that of the principal or three or four teachers. With them gone you manage to limp along somehow, but if, on any day, between October and May, you can't get a janitor you have to close the works.

I ESTIMATE I have personally known 228 school janitors. I have worked in the same building with fourteen. Only one had to be discharged. He was first-rate except when he came to school so tipsy it didn't seem right to let him tend an old boiler under a thousand children.

HIS very faithfulness on such occasions was his undoing. If he hadn't come he wouldn't have gone.

THEY sit up all night nursing debilitated heating plants that you may be comfortable.

JANITORS have more pestering requests handed them than principals do. Their brakes on their tempers are more reliable. Nobody takes more pride in the scholastic success of the school than the janitors. Janitors knock down and drag out ruffians who insult women principals.

A CHICAGO school janitor waded through ten inches of scalding water to save a boiler from exploding under a school. They named a school-house for him. A Brooklyn janitor carried a mad dog out of a classroom and locked it in a closet.

YOUR chances of finding your janitor to be a real man are like the risk of getting a good wife if you go courting in Maine—almost a cinch. Appreciate him.

Your Everyday Problems:*

Administering Home Rooms in Junior High Schools

By JOHN GUY FOWLKES, Professor of Education, University of Wisconsin

ONE of the most interesting and at the same time most recent developments in the junior high school is the home room. An indication of the recency of this unit in the junior high school is the fact that not a single article concerning the home room in the junior high school is listed in the "Reader's Guide" during the period 1919-28 while between 1928 and 1931 some thirty-two articles concerning the subject involved are listed.¹

Several definitions of the junior high school home room have been formulated, but for this discussion the home room will be considered as a room which a group of pupils make their "base of operations," and which is directed by a specifically designated teacher. A survey of current literature reveals that two major functions are expected of the home room—pupil guidance and the efficient execution of certain administrative routine.

Specific Programs Outlined and Explained

One of the things needed most in organizing a home room is familiarity with the present practices in the management of home rooms. The following four illustrations are representative of the best practices with respect to home room management at present.

1. Sarah E. Bundy presents a home room program in use in the city of Los Angeles. The procedure is outlined in an article entitled "Giving the Home Room Fair Consideration." The program is as follows:

Specific plan for the profitable use of the home room period. The items in this plan include (a) daily reading or delivery of all notices; (b) supervised study with opportunity for individual interviews between the pupils and teachers on Monday, Tuesday and Wednesday of each week; (c) school paper day on Thursday with the privilege of reading the weekly issue—nonsubscribers may

use the time as a study period; (d) special activities on Friday—discussion every other Friday on topics developed through the presidents' forum and programs of some type (pupil talent, parliamentary practice or other activities) on the alternate Fridays.

Various Plans Are Being Tried

2. Elmer H. Wilds presents a new plan of providing various types of guidance in the junior high school through the use of the home room. This plan is discussed in his article entitled "The Home Room Period." The outline follows:

Seventh grade discussion units: parliamentary procedure; manners in the school; health; hobbies for boys; hobbies for girls; safety; bird study; honesty; care and repair of clothing; pets.

Eighth grade discussion units: leadership; manners in the home; cooperation; community sanitation; good sportsmanship; manners in public places; first aid; ownership; camping and woodcraft; thrift.

Ninth grade discussion units: how to study; budgeting of time and income; speech; appropriate dress; community history; the house beautiful; music appreciation; entertaining; art appreciation; aims of education.

3. Gladys E. Moore has outlined a program for home rooms in an article entitled "A Home Room Guidance Plan," which is as follows:

Methods of carrying on home room programs: informal discussions led by pupils or teacher; programs planned and given by pupils under the direction of the teacher; plays, pageantry and dramatizations; debates and lectures; bulletin boards, posters, striking cartoons, pictures or films; poems or excerpts from speeches; committee work; self-rating scales; intra-home room contests; inter-home room contests; exchange of home room programs; talks by individuals from other home rooms; use of teachers, dean, counselor or principal in conducting programs.

4. Philip W. L. Cox has cited three outstanding examples of home room procedure in his book entitled "The Junior High School and Its Cur-

*Discussions in this department deal with problems that frequently confront principals and superintendents. Inquiries on problems of this nature should be addressed to Doctor Fowlkes.

¹P. E. Killion, a student in the 1931 summer session of the University of Southern California, contributed part of the material included in this discussion.

riculum." The three junior high schools referred to are in Rochester, N. Y., Philadelphia and St. Louis. The three plans are as follows:

At Washington Junior High School, Rochester, N. Y., the home room plan received its initial emphasis. It has developed there in perhaps a too uniform manner. Each room has five officers. The room president is class leader, the presiding officer at all class meetings and the agent for library campaigns and other school enterprises. The vice-president is business manager of all home room activities and as the "safety first" manager of all home room activities and as the "safety first" representative inspects and remedies menaces to sanitation and health. The secretary-treasurer is in charge of school reports and of all communications with the office, is custodian of class funds and is in charge of savings accounts and thrift stamps. The usher is a reception committee of one to receive visitors, and to escort them through the building. He also leads his group in passing through the corridors, being required on his own ingenuity to extricate them from corridor congestion. The deputy is in charge of group discipline, dismissing the class and maintaining order of his group in the corridors.

In Philadelphia and St. Louis

At the Oliver Wendell Holmes Junior High School, Philadelphia, the home room units are known as "chapters" of the Industrious Civic Union. The pupils of each chapter elect their representatives to the civic groups known as the council or the administrative committee, the department of public works, the department of sanitation and the department of social welfare. During home room elections, as in all of the school, two principles are of current emphasis: first, the significance of responsibility in choosing capable delegates to the governing groups; second, the readiness of every individual, whether elected or not, to give himself unreservedly to the public weal. Every Friday each teacher conducts personal conferences with the pupils of her own home room. Such guidance periods are strictly confidential; no visitors are permitted to attend them; even the principal of the school makes a point of not entering a room during the final conference hour on Friday.

At the Ben Blewitt Junior High School, St. Louis, the home room advisory period was given a regular place in the seventh grade schedule—somewhat greater in allotment than was given to any other "subject." The pupils were regularly with their advisers five minutes at the opening of school each day and sixty minutes in the middle of every school day. During these advisory pe-

riods there were no subject matter lessons, although classes occasionally were helped to prepare lessons with which they were having difficulty. Chiefly, their activities during these home room periods dealt with the class problems and responsibilities. The home rooms and their sponsors became associated in common enterprises and so there developed mutual loyalty and pride in group teams, group assemblies, group records, group reputation, group mottoes, and name and songs and secret formulas, group responsibility for property, for discipline and for the welfare of all the members, and group pride in the individual achievements of its members. All of these common aspirations and successes—and occasional disappointments and sorrows—integrated the group and evolved worthy social selves for every individual.

Trouble Spots That Must Be Watched

As is true of most new institutions, "trouble spots" have developed in connection with the home room, which in some cases have proved irritating. The basic cause of trouble in connection with the home room is the lack of a definite program. Trying to run a home room without a carefully developed program is analogous to trying to administer a school system without a curriculum, an adequate accounting system and other essential administrative devices. Kefauver and Scott, upon the basis of a study of 130 secondary schools, point out the possibilities of the home room. Every administrator who is organizing or administering the home room plan should consult this study. In general the activities of a home room should include guidance, counseling, clerical work for the teacher, study periods, school activities of various kinds and administrative needs.

The other factors that frequently prove troublesome in connection with the home room are: (1) time of period, that is, the period of the school day devoted to home room activities; (2) length of period; (3) size of group; (4) basis for grouping; (5) the personality of the home room teacher. With the exception of the last, these are matters of detail, and little or no definite suggestion can be given because of the influence of the size of the school, the type of curricula and the teacher and building facilities upon these factors.

Morning Meetings Are Popular

The period of the school day devoted to home room activities will depend upon the school and its general schedule of classes. The majority of schools, however, have found a way to have the home room in the morning even if it is only for a few minutes. The purpose is to read announce-

ments and bulletins, to check attendance, to do a bit of counseling and to start the pupils on the day's program with a full knowledge of the activities that are ahead.

The length of the period in the majority of the schools runs from twenty-five to thirty-five minutes. A long period—fifty minutes or more—becomes too difficult to manage and plan, and a short period—five or ten minutes—does not give the teacher enough time to execute a well thought out plan.

Determining Size of Home Room Group

The size of the home room group ordinarily will be the same as a regular class. From thirty-five to forty pupils, however, is the general procedure. The home room teacher is expected to become intimately acquainted with each pupil, and consequently the group should not be too large.

The basis for grouping is variable and again depends upon the size and policy of the school. In the average high school, the basis for grouping is by grades—such as 7B, 7A, 8B, 8A, 9B and 9A. In the larger schools, these grades may be divided according to sexes, such as 7B boys and 7A girls. The home room group, once it is organized, usually moves by groups into various classes throughout the day.

The personality of the home room teacher is a decided factor in the successful achievement of this unit. A well planned home room program may be a complete failure if it is administered by an antagonistic and irritable teacher. It is the study of the administrative officer to guard against such a possibility. The teacher needs patience in executing home room plans, and the administrator needs experience in assigning proper teachers to certain home rooms.

The Future of the Home Room

As is true of many practices in public schools, the home room should be evaluated and steps taken either for its abandonment or improvement. This statement suggests the following questions which every administrator might well direct at the school for which he is responsible: (1) What service to the pupils is the home room in the school which I administer attempting to render? (2) What are the major functions of a home room? (3) Is the home room successful? (4) Is the home room worth while? (5) What are some of the miscellaneous factors affecting the successful operation of the home room?

There seems to be a strong consensus in favor of the home room. If the stated purposes of home rooms are realized, the value of the home room certainly cannot be denied. The next decade

should prove that the home room can be administered properly and therefore make schools finer and richer experiences for pupils.

Bibliography

- Cox, Philip W. L., *The Junior High School and Its Curriculum*, Scribner's Sons, Boston, 1929.
 Cubberley, E. P., *The Principal and His School*, Houghton Mifflin Co., Boston, 1923.
 Davis, C. O., *Junior High School Education*, World Book Co., Yonkers, N. Y., 1924.
 Evans, Hallman, and Scott, *Home Rooms*, A. S. Barnes and Co., New York, 1930.
 Good and Crow, *Home Room Activities*, Professional and Technical Press, New York, 1930.
 Gordon and Seasholes, *The Home Room Teacher*, Neighbor and Riggs, Newark, Ohio, 1930.
 Gordon and Seasholes, *The Home Room Pupil*, Neighbor and Riggs, Newark, Ohio, 1930.
 Johnson, F. W., *The Administration and Supervision of the High School*, Ginn and Co., Boston, 1925.
 Lyman and Cox, *The Junior High School Practices*, Laidlaw Bros., Chicago, 1925.
 McGregor, A. Laura, *The Junior High School Teacher*, Doubleday, Doran and Co., Garden City, N. Y., 1929.
 Pechstein and McGregor, *Psychology of the Junior High School Pupil*, Houghton Mifflin Co., Boston, 1924.
 Sears, J. B., *Classroom Organization and Control*, Houghton Mifflin Co., Boston, 1918.
 Spaulding, Francis T., *The Small Junior High School*, Harvard University Press, 1927.
 Touton and Struthers, *Junior High School Procedure*, Ginn and Co., 1926.

PERIODICALS

- Bundy, Sarah Elizabeth, *Giving the Home Room Fair Consideration*, *School Review*, vol. 37, 1929, p. 780.
 Kefauver, Grayson N., and Scott, Robert E., *The Home Room in the Administration of Secondary Schools*, *Teachers College Record*, vol. 31, 1930, p. 624.
 Killion, P. E., *The Duties of a Typical Home Room Teacher*, *The High School Teacher*, June, 1931, p. 237.
 Moore, Gladys E., *A Home Room Guidance Program*, *The Vocational Guidance Magazine*, Jan., 1931, p. 160.
 Threlkeld, C. H., *Guidance Through Activities*, *Junior-Senior High School Clearing House*, March, 1931, p. 412.
 Wilds, Elmer H., *The Home Room Period*, *School Executives Magazine*, March, 1931, p. 322.

Enrollment in Professional Schools Shows Increase

Enrollments in the professional schools throughout the nation continue to mount in spite of more rigorous standards and higher tuition, according to Dr. Walton C. John, specialist in higher education, Office of Education.

Engineering students outrank all other groups with more than 78,600, while law students follow with more than 42,600.

One of the most interesting developments in professional training in recent years has been the study of aeronautical engineering. Six years ago only 122 students were enrolled in this field throughout the country. In 1927-28, the number had increased to 614. Since then the enrollments have mounted to 2,057.

Enrollments in medical schools exceed 21,400, while those in theology are less than 14,000. Both medicine and theology maintain a steady growth.

More than 11,000 students are pursuing pharmacy, 9,000 dentistry, and nearly 2,000 osteopathy. There are 4,659 students studying architecture.

As the professions tend to become crowded, it is expected that enrollments will tend to reach a point of equilibrium.



How about a Christmas present for the school!

As a Christmas present which everyone connected with your school will enjoy—install Sealex Floors. During the holiday vacation is a good time to get it done without interfering with the classroom routine.

Your teachers will appreciate the resilient comfort and quietness of these modern floors. They mean less jarring of taut muscles—less wear and tear on the nervous system.

Your pupils will respond to the cheerfulness of Sealex Floors. These materials come in a wide variety of attractive colors and designs suitable for school use.

Your janitor will thank you for installing easy-to-clean Sealex Floors. The tiny open pores of ordinary linoleum are hermetically sealed against dirt by the Sealex Process. There are no dust-collecting, unsanitary

cracks in Sealex Floors—no dangerous splintered surfaces.

And, finally, you will appreciate their economical advantages. Sealex Floors for every school purpose are well within reach of the ordinary budget. There's no scraping or repainting to boost maintenance costs.

Furthermore, when Sealex Floors are installed by an authorized contractor of Bonded Floors, they are backed by a Guaranty Bond. For further information, write our School Floors Department.

CONGOLEUM-NAIRN INC. KEARNY, N. J.

SEALEX
LINOLEUM FLOORS

Schoolhouse Planning:

Financing the School Plant Program Economically

By ARTHUR B. MOEHLMAN, Professor of School Administration and Supervision, School of Education, University of Michigan

THE technical survey of school plant needs has been completed; the educational policies under which the school plant program must be developed have been considered; the field survey has been made in all of its exacting details; the existing plant has been carefully studied and judged in its relation to the future plant; the ultimate plant needs have been determined for a long period and the tentative rate of progressive achievement has been established. The next problem is to devise ways and means of financing the proposed school plant needs satisfactorily and economically. This and the succeeding article will be devoted to a consideration of school plant finance.

Any well conceived bit of social planning has two financial aspects. The first of these is the long time plan and the second is the short time plan, or the manner of progressive achievement. Long time planning is essential to obtain the complete picture of possibilities and the general methods of development. It is a projection into the future. Since any method of prognostication over a long period of time is dangerous, owing to possible rapid changes from the practical standpoint, long time planning may be considered only as a guide. Short time planning is the method by which the actual program will be achieved.

Policies Must Be Flexible

While long time planning establishes general policies and methods, these must be flexible enough to shift with changing conditions. Such a plan must be considered essentially as a road on which the traditional detour may be necessary at any time. Both types of planning are conditioned by many factors and by diverse methods. For the purpose of this discussion planning will be considered this month and methods of developing the program will be considered in the succeeding article.

A study of the development of the ultimate plant has given us the background in the light of future needs. The first step in establishing the long time financial program is estimating the expense of the ultimate plant. Expense may be considered under

four major divisions or activities: the cost of the site; plans and construction; equipment and decorating, and landscaping and playground development. The total of this estimate for any single project represents the cash outlay immediately required for capital improvement.

Estimating the Site Cost

After the sites have been decided on and the policy of acquisition determined, it is necessary to estimate the expense of acquisition. Probably the best way to do this is to search available transfer records to obtain the exchange price of near-by territory. Selling prices may be then compared with the assessed valuation and the relation between these two factors determined. Since valuation is so subjective a factor, it is always difficult to estimate the actual transfer price at any given time unless the latest sales are studied. The estimate of cost will be further conditioned by the policy of acquisition. If the property is obtained through condemnation the final estimate of price depends upon the intelligence of the jury. If the property is acquired by direct or indirect sale, the price may vary greatly depending upon the willingness of the owners to sell. If information regarding the program has leaked out, realty speculators may quickly option the near-by sites and hold them for higher prices. The variables involved in site cost estimation are so many that it is extremely difficult to present anything but very general procedures.

After the probable expense of site acquisition has been determined as carefully as possible, the second step is to decide on the order of acquisition. The site should be acquired at least one year in advance of building or, better still, five years. If the property is to be obtained by condemnation instead of by direct purchase, the actual time required for the court procedure, plus the extra time that might be required by a possible appeal of the decision to a higher court and the subsequent retrials, must be considered in determining the time acquisition program.

*"What is the
best way to finish
and maintain
floors?"*

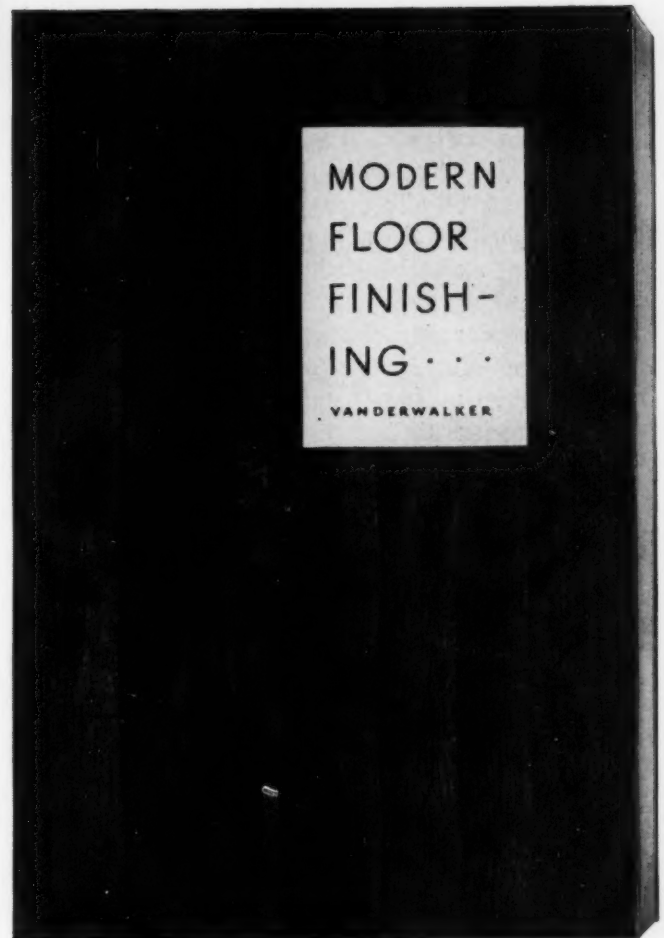
NEW 90-PAGE
ILLUSTRATED BOOK
BY F. N. VANDERWALKER

**gives valuable, detailed
information. Priced at \$1⁰⁰
Will be sent FREE to anyone
concerned with floor
maintenance
problems**

Old-fashioned methods of floor finishing and floor maintenance do not meet present-day needs. New types of flooring material and the increased service to which floors are subjected call for a greater knowledge of floor maintenance methods.

Mr. Vanderwalker's book explains these new methods of floor finishing and suggests the proper and most economical care for each type of floor. This information will be of great help to you in preserving the beauty of your floors and giving them longer life.

USE GENUINE
JOHNSON'S WAX
FOR 45 YEARS THE STANDARD SERVICE



S. C. Johnson & Son, Floor Finishing and Maintenance Authorities,
Dept. NS11, Racine, Wisconsin.
Gentlemen: Please send me without obligation my free copy of F. N.
Vanderwalker's 90-page illustrated book "Modern Floor Finishing."

Name

Address City and State

Estimates of sites are based on current values. For those sites, the acquisition of which is deferred far into the future, it is necessary to consider the probable change in value during that period. By preparing careful cost zone maps of the district for the past decade and correlating these with probable growth and development, a correction table by years may be developed. The original site estimates may then be treated according to the probability of increase by years and arranged in tabulated form with "years" as the vertical column on the left and "sites" as the first horizontal item across the top. The expense program is now completed as far as is possible at this time.

Factors That Influence Building Expense

The next step is to determine the probable expense of the buildings themselves. This includes remodeling, additions to the existing plant and new buildings. There are three factors involved—the expense of educational designing, the expense of plans and supervision and the expense of construction. Even though there is to be no immediate building, it is necessary to design educationally at least one future building of each type, elementary, junior high school and senior high school. Since there has been little educational designing in most districts in the past, it is absolutely essential to obtain an objective translation of the general educational and building policies into a basic plan, thus establishing the actual physical requirements for each type of school. These plans must then be treated and developed by the architect to determine structure and design. If the buildings are needed immediately, the plans may be pushed to early completion but if only estimates are desired for the development of the financial program, the preliminary architectural drawings, from which quality and area may be objectively taken, are sufficient.

The architect should estimate the cost of the several types of buildings in terms of instructional and physical needs as established in the basic plans. The several items of cost, based upon current price indexes, may then be assembled and allocated tentatively by years in the second column of the program table in which "sites" have already been listed. In the estimation of building expense it is difficult to obtain reliable data beyond the immediate present. The trend of building or the construction index is interesting but not entirely reliable. Probably long time indexes, showing the relation of succeeding peaks and valleys, may have some significance but it is questionable whether the estimation of cost should depart far from the immediately ascertainable trends. The present depression is an illustration of the uncertainty in this field.

The third problem for study is the need for equipment and decorating. Some specialists include immediately the cost of decorating as an item in construction cost. The reason for this procedure is that while it is relatively easy to obtain money for a complete project at the time of the construction, later appropriations for the same structure are more difficult to obtain. From the standpoint of good practice, it is better to defer the decoration of the school plant until at least one year after its construction. There are two methods of doing this. The first is to provide for decoration in the original appropriation and maintain a ledger credit for several years until the work has been completed. The difficulty with this procedure is that generally the money is used for some other purpose. The second is to include a specific appropriation for decorating in the general requests for equipment.

If the decorating appropriation is combined with the equipment needs, it will be available at the time the building is ready to be treated. It is also possible to include all three items, plans, construction and decorating and equipment in a single appropriation and keep the specific subappropriations on the books until they are needed. This is a reasonably safe procedure if the board of education is strong-minded.

The type and amount of equipment must be determined by curricular study. It is good practice to establish certain experimental rooms in the existing plant where instructional specialists may use different types of equipment to determine their value. After the program of needs has been instructionally determined it is easily possible to develop equipment standards and to estimate the cost on the basis of current catalogue prices. After equipment needs have been translated into money, they may be placed in the third column of the program cost table, in relationship to the projected buildings, either in the same budget or in the successive budget.

Why "Standard" Is a Dangerous Word

Landscaping and playground development, a need as essential as building and equipment, cannot reasonably take place until after the building has been completed and the site cleaned of construction debris. This group of activities of necessity follows building construction. The estimates may be included in the succeeding budget. The estimation of cost will depend on the landscaping and playground development policy. It will also vary with the character and size of the site. For general purposes it is possible to plan typical key sites for each type of school and then estimate the expense of development within a reasonable mar-

Largest High School in America



Architects:
Ernest Sibley &
Lawrence C. Licht
General Contractor:
Karno Smith Company
Electrical Contractor:
Walter Kidde Constructors,
Inc.
Consulting Engineers:
Bunyon and Carey

TRENTON CENTRAL HIGH SCHOOL
Trenton, New Jersey

BY SPECIFYING Holtzer-Cabot equipment in this newest and largest Central High School, the architect and electrical contractor have secured for the principal and teaching staff continuous trouble-free signaling service which will conserve their time and increase the efficiency of the entire school.

Whether your requirements are for a fire alarm, program bells, telephone or laboratory electrical control and distribution system—a Holtzer-Cabot installation will place the school on a more efficient and economical operating basis.



THE HOLTZER-CABOT ELECTRIC COMPANY

BOSTON

CHICAGO

OFFICES IN ALL



PRINCIPAL CITIES

PIONEERS IN SCHOOL SIGNALING SYSTEMS

gin of safety. Again, these estimations can be made only after policy has been established and translated into key plans.

At this point a word of caution is desirable. These key plans, whether for building, equipment or landscaping and playground development, should not be considered or designated as "standard plans." The American tendency to consider standardization as an end instead of a means will react quickly to any "standard plan," and great difficulty will be experienced in making progressive change. These are merely type or key plans, representing a basis for estimating and expressing adopted policies, and must not be considered as inflexible conceptions. In this respect it would be well if superintendents eliminated the word "standard" from their vocabularies.

The estimates for landscaping and playground development may now be transferred to the table with the other three items. By adding these four columns horizontally, the estimated plant expense in any one year may be determined. By adding them vertically the estimated outlay for any of the four major items may be determined. The final figure, or sum of all these items, will represent the estimated expense of the entire program. This tentative estimation may now be placed on one side while other pertinent factors are considered.

Other Obligations

Each school district represents continuing activity. The current program of educational service must be financed. Almost every community has in addition the responsibility of meeting past expenditures for capital improvement. These current obligations represent the largest item in any given year. The apparently general feeling appears to be that everything that is now required is to erect new buildings as the need arises and all will be "dew and sunshine." The reverse is actually true. The initial expense of erecting and developing a building is the smallest item finally involved. For every new structure there is the expense of instructional and physical operation and the essential outlay for upkeep. The continuing cost of operating and maintaining a school plant is far in excess of the initial expense of development. One example will be sufficient.

A certain school district ten years ago erected a million dollar secondary school that was the pride of the community. The strong supporters in the community were apparently not instructed beyond initial expense and the probable cost of bonding. The manner in which the bonds were marketed means that the community will pay eventually \$2.35 for every dollar of building constructed. The cost of operation and upkeep has averaged \$260,000

annually since its erection. The present superintendent wonders why the community which so enthusiastically supported his predecessor in the development of the plant removed him two years after completion and now grumbles about the "reckless extravagance" of the board of education. If the obligations originally had been presented in their entirety to the citizens, present attitudes might be different.

Determining the Community's Ability to Pay

In the development of the finance plan for the school plant program, the factors of current expense and increasing current obligations must be studied just as carefully as the expense of the construction program itself. The probable demand for educational services, classified by type, has been determined within reasonable limits by the school plant program study. The technique consists in providing for these increased needs parallel with the program of physical enlargements earlier considered. If such studies were made in conjunction with every school plant survey, the chances are that many errors would be avoided and the tenure of many superintendents would be lengthened. It is popularly believed that in planning a school plant program one has merely to draw circles on a map and then proceed to erect buildings without basing the program on a searching physical-social-economic study of the community and without seriously studying the financial situation. The school plant program is one of the widest and most detailed studies in the field of administration.

If these studies have been made in sequence, the executive now has at his disposal: the estimated building requirements, tentatively established by years; the probable increase in the expense of current service to operate and maintain the projected structures; the story of the past obligations of the community with respect to financing capital improvement. These three studies, carefully correlated, will supply the general picture of expense.

The willingness of a community to meet its educational needs will be conditioned by its degree of understanding and appreciation at any given time. The solution to this problem lies in the field of public relations. The community's ability to pay is determined by its economic status and to a large extent by the traditional methods of financing and the size of the district. Further restrictions are in many states arbitrarily determined by statute. Every community has other social and political obligations that must be considered, for it is well to bear in mind that the typical school district finance requirements represent only one of the many social needs of that district. Health, police and fire protection; public libraries and art insti-

The Man that Every Child Should KNOW



*Now motion pictures will unfold the inspiring drama
of his life so that pupils may remember it with all the vividness
of actual experience*

A REMARKABLE group of motion pictures is in preparation. It is the story of *George Washington—His Life and Times*, now being produced by Eastman Teaching Films, Inc., at the request and with the coöperation of the George Washington Bicentennial Commission. It is the only picture on Washington's life to be so produced.

The purpose of this series of films is to enable both children and adults to know Washington. The films will present, accurately and with dramatic power, the leading events in his life,

and his great services to his country. Once seen, these stirring pictures will



*On the screen: Governor Dinwiddie makes
Washington Commander of the
Virginia Regiment.*

engrave upon the minds of young and old alike a vivid, lasting impression of the beauty and heroism of Washington's life and character.

Four 15-minute reels, obtainable in both 16- and 35-millimeter widths, tell the story. They include many incidents never before shown on the screen.

The services of experts in every field have been utilized to make the story real and authentic. For complete information, address: Eastman Teaching Films, Inc. (Subsidiary of Eastman Kodak Company), Rochester, N. Y.

Produced by EASTMAN TEACHING FILMS, INC.

Subsidiary of the Eastman Kodak Company, at the request of

THE GEORGE WASHINGTON BICENTENNIAL COMMISSION

tutes; paving, lighting, water and sewage, and the cost of general civil government are all contributing problems.

The study of the ability of the community to pay will be prefaced on the consideration of all these demands, plus the potential future power of the community. This future ability has also been determined by the economic survey made earlier in the study and should result in a fairly clear picture of just what is going to develop. Naturally, the stimulating and depressing ascertainable factors have been given due weight in the plan.

Need has been established and the probable ability of the community to finance the project has been determined. These two factors may now be brought together and studied in their correlative relationship. It is assumed that both factors were conservatively and objectively developed. Careful and detailed study must now be made of the possibility of carrying out the program. Both factors may be in good relationship, in which case it is possible to proceed to the next step. The educational program may not be in relationship to the ability of the community and it may therefore be necessary to restudy carefully the educational findings and possibly make changes in basic policies.

One vital factor may be the method of administration and the size of the classes. Others may be experimentation with more efficient methods that will reduce both construction and operating expense. The determination of the community's program in relation to the community's ability to pay can be done only in terms of an exact situation. Lack of relationship does not indicate unintelligent cutting or slashing of the instructional needs. It does indicate, however, the need to determine objectively if certain apparent changes might be desirable instructionally. It may merely mean modifications of the adopted or traditional financing policy or retardation of the program by the process of stretching or deferring. Whatever the result, it is essential that the needs of the community and the ability of the community shall be in close and practical relationship to each other. When this fact is accomplished, it is possible to consider methods of financing.

American Dialects to Be Studied for Linguistic Atlas

Studies in American dialects in preparation of a Linguistic Atlas of the United States as one of the projects of the American Council of Learned Societies started in New England on August 17 under the direction of a group of scholars headed by Dr. Hans Kurath of Ohio State University.

During the next fifteen months 1,000 persons will be interviewed, each being asked 1,000 questions to determine the habits and forms of speech of the region.

These studies will be a valuable means of preserving historical records of colloquial expressions that are rapidly passing out of existence in the United States with the advance of science and an increasing uniformity in thought and expression.

Doctor Kurath and Prof. Miles L. Hanley of the University of Wisconsin will start the investigation in Connecticut. Dr. Guy Lowman, holder of a Sterling Fellowship from Yale University, and a student for the past two years in the University of London, will gather material in Vermont, Cassil Reynard, formerly of the Case School of Applied Science, Cleveland, will be in charge in the Plymouth area of Massachusetts. Martin Joos, graduate student in the University of Wisconsin, will work in western Massachusetts.

How Information Will Be Gathered

After interviewing language experts in the schools, colleges and universities of New England, the investigators will visit cities, towns and rural districts.

"Persons in every stratum of society will be visited so that the words familiarly used by the farmer, the old settler, the social leader, the laborer, the banker, the fisherman, the housekeeper and the ordinary business man may be recorded," Doctor Kurath says.

"It has taken more than two years of preparatory work to determine what questions should comprise the questionnaire. The first part covers the common words used in daily life to describe such things as the home, food, clothing, furniture, dishes and kitchen utensils, farm implements, weather and geographic features of the country.

"The investigator begins by giving definitions, and asking for the word which that person is accustomed to use for the particular article described. For instance, he may say: 'What would you call a deep, narrow valley?' The answer might be: a ravine, glen, valley, gulch, gorge, hollow, gully, dingle, dale, vale or dell.

"The information we plan to obtain in our study of New England will be such as is required for a detailed history of our language. While the average American may believe we all speak the same language, this is true only in a measure. Certain studies which have been made show that in some words there are from 1,500 to 2,000 variable features which are shown in spelling, vocabulary, inflection or in use in a set phrasing. When completed, the atlas will present a well organized collection of the facts of our speech."

Hundreds of schools have **SOLVED** this problem



Sanitation demands the *modern* method of waste disposal—INCINERATION. Kernerator has successfully met this demand in hundreds of schools, is "paying its way" by eliminating the cost of hauling away rubbish and garbage from cafeteria or lunchroom.

Hopper doors, conveniently located on each floor, receive all waste—papers, sweepings, wilted flowers, garbage from cafeteria or lunchroom, sanitary napkins, paper towels and other wash-room debris—no storage, no transportation. The material drops down the flue to the incinerator chamber in the basement. There it is destroyed by burning. Non-combustibles—tins, bottles, crockery—are flame-sterilized and removed with the ashes. The air-dried waste furnishes the fuel for its own destruction—no cost for commercial fuel.

Kernerator may be installed in both new and existing schools.

Consult your architect and write for booklet, "The School Problem of Waste Disposal Solved," with names of schools using the Kernerator.

KERNER INCINERATOR COMPANY
3547 N. RICHARDS STREET, MILWAUKEE, WIS.
Offices in over 150 cities

KERNERATOR

INCINERATION

This Man can Save you **Money** on Toilet Partitions



The purchase of Mills Metal Toilet Partitions offers economies far deeper than the purchase price.

Erection costs are low because Mills engineers designed the entire partition from a practical standpoint. (Panels attached to post with clips.) This feature, together with the adjustable shoe and 2-piece adjustable wall bracket, makes erection an easy, quick *One-Man-Job*.

Mills Partitions, made of quality steel sheets, with indestructible assembling accessories and hardware, are practically free from maintenance expense.

To determine the true savings made possible by Mills Metal Partitions, write for the two New Toilet Partition Bulletins.

THE MILLS COMPANY

"A Mills Metal Partition for Every Purpose"

Offices — Factories — Toilets — Showers — Dressing Rooms

906 WAYSIDE ROAD, CLEVELAND, OHIO
Representatives in All Principal Cities

MILLS METAL

TOILET PARTITIONS

Practical School Administration:

How the Service Clubs Can Further the Work of the Schools

By PHILIP C. LOVEJOY, Chicago

A SUPERINTENDENT recently wrote to the central bureau of Rotary International asking for material on the topic, "Rotary and Its Relation to the Public Schools." He was to address his local club on this subject and would be grateful for any suggestions that would assist him in his presentation.

Here was a superintendent who had an opportunity to bring the schools to the attention of the outstanding citizens of his community and who recognized it. He was anxious to profit by the wider contacts of a great central organization. Since, in the last analysis, a large central service bureau can only suggest general principles, the superintendent was advised to present a carefully developed survey of the condition of public education in his own community. Since he was closely in touch with educational needs, he, better than anyone else, could present these needs to his fellow club members.

Cooperating With the School Executive

Service clubs exist to be of helpful influence in their community. In the past they have listened attentively to school men while they outlined the problems confronting the town's educational system. They will continue to do so. Their members are active in business. They are the taxpayers. They want to know about their schools. They realize that the future of this country will be determined largely by the type of educational system that is maintained. They know that the schools are molding the habits, ideals and aspirations of present day youth. They know that the future of business depends on the educational facilities that are provided to-day. They know also that to-day's children must get their education to-day. For these reasons as well as for many others, the program committees in the service clubs have frequently asked school executives to present three or four programs discussing some of the outstanding problems of the schools.

Far too frequently in the past school men have been content to let the local clubs invite the football, the basketball and the baseball players to a

meeting to do them honor, to the exclusion of pupils in other fields of educational activity. On the other hand, in a great many places a splendid cooperation exists between the schools and the clubs to the extent that each month a special group is the guest of one of the clubs. One month it is the ten best pupils from the scholastic point of view. The next month it is the debaters and public speakers. Another month it is the commercial students with their typewriters, comptometers, billing machines and stenotypes. The superintendents in those towns are making the best of an opportunity to tell the men most interested how a third or more of their local taxes are spent.

How to Benefit by a Survey

There are many things that a school executive can ask of his service clubs. He can suggest to them that they unite to make a complete community survey as was done in Salt Lake City. He can refer them to the result of that survey published in a compact booklet under the title, "The Boys and Girls of Salt Lake City," in which are specific recommendations of great value to any community that is earnestly thinking about the problems that confront its youth.

Reference to less pretentious surveys may also be made. There is the survey made in Independence, Kan., with numerous recommendations, which contains the following statement: "The schools of Independence are doing a wonderful piece of work, all that they can be expected to do under their present budget. The progress that has been made in vocational work and the fine athletic equipment in the school buildings are relatively superior to what is found in most cities the size of Independence. The boy is perfectly safe in school time. It is after the boy leaves school that the danger period begins. It would be well for the citizens of Independence to consider the advisability of opening the gymnasiums and the swimming pools after school hours and particularly at night so that the boy may have some place to go to work off his surplus energy and to make the best use of his free time."



WRIGHT- DECOSTER HYFLUX Speaker

Schools all over the country are equipping with Wright-DeCoster

Hyflux speakers in classrooms, laboratories, shoprooms and other smaller rooms, because it is so clear and distinct in reproduction, so highly satisfactory in every way.

For auditoriums, gymnasiums and other large rooms, the larger No. 207 Wright-DeCoster Speaker is being used extensively in school amplification systems. Remember, no school sound equipment is more efficient than its reproducers. To assure greatest satisfaction, use Wright-DeCoster Speakers.

Write for complete information and address of nearest sales office

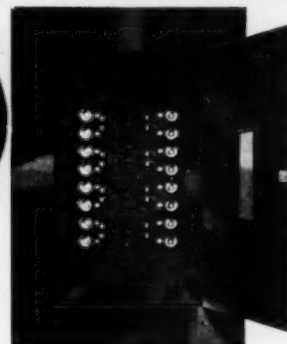
WRIGHT-DECOSTER, Inc.

2247 University Ave. St. Paul, Minn.

Export Dept., M. Simons & Son Co., 25 Warren Street, New York City
Cable Address: Simontrice, New York.



**Panel
boards**



**for
S
C
H
O
O
L
S**

Children Can Handle these Switches Safely

Circuit distribution panelboards in schools should be of the permanently safe type, first constructed by **FA**. **FA** Panelboards with this safety include standardized unit construction, sturdy parts, long life with low maintenance cost and quick economical installation. There is a type and size for every purpose.

Free estimating service. Complete catalog upon request.

Frank Adam

**ELECTRIC COMPANY
ST. LOUIS**

Albuquerque, N. M.; Atlanta, Ga.; Baltimore, Md.; Boston, Mass.; Buffalo, N. Y.; Chicago, Ill.; Cincinnati, Ohio; Cleveland, Ohio; Dallas, Texas; Denver, Colo.; Detroit, Mich.; Kansas City, Mo.; Los Angeles, Calif.; Memphis, Tenn.; Minneapolis, Minn.; New Orleans, La.; New York, N. Y.; Omaha, Neb.; Philadelphia, Pa.; Pittsburgh, Pa.; St. Louis, Mo.; San Francisco, Calif.; Seattle, Wash.; Tulsa, Okla.; Toronto, Can.; Vancouver, Can.; Winnipeg, Man., Can.; Calgary, Alberta; Hamilton, Ont.; Montreal, Can.

A Problem Solved by Experience

**AMERICAN
SCHOOLS**

The problem of flooring for your schools may seem like a sticker, but it's really the easiest problem in the book. Follow the solution worked out by the Minneapolis School Board; select **ROBBINS Hard Maple** and pass the strictest examination with a perfect mark. That greatest teacher, Experience, has conclusively proved the answer time after time.

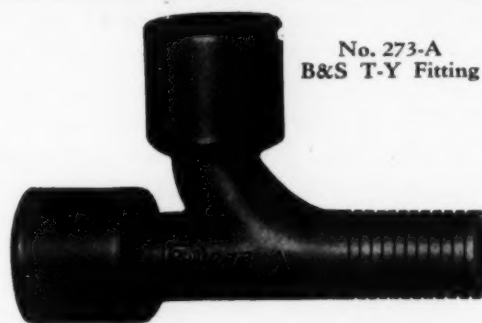
*Write us today for complete information about **ROBBINS Hard Maple Flooring** for schools.*

Robbins Flooring Co.
RHINELANDER, WISCONSIN

**Folwell School
Minneapolis, Minn.**

Architect, E. H. ENGER, School Board Architect.

Contractors, PIKE & COOK, Minneapolis.



Specify Knight-Ware

JUST as important as the sinks and other equipment are pipes and fittings for waste and drainage purposes. Let them be of Knight-Ware, too. It is positively acid-, alkali- and corrosion-proof . . . tough and durable, resisting abrasion . . . easily and economically installed . . . less expensive than silica irons . . . permanent, lasting as long as the building.

*Convincing literature
upon request*

MAURICE A. KNIGHT
COOK SETTLEMENT STREET
AKRON, OHIO

KNIGHT-WARE
"IT IS THE BODY ITSELF"

The recommendations of the Independence survey are listed as follows:

"It is therefore essential to provide supervised recreational activities that will attract boys through the proper use of the leisure hours by providing programs of a character building nature.

"It is essential that a means be provided for physical development and care of health, especially during spare time hours, particularly to meet the needs of working boys.

"It is essential that some way be found to reach boys who have left school, and with friendly counsel encourage them to renew again their educational pursuits during their leisure hours.

"It is therefore essential that there be established agencies with an attractive program sufficiently compelling to draw all boys to it, and its activities, social, recreational and occupational, shall be combined in such a manner as to give boys actual participation in the responsibility of its management by a self-governing system formulated upon plans of the local city or the Government."

What Taxpayers Should Know

Because of the present period of economic stress and strain, extra care must be taken to see that taxpayers are not allowed to become shortsighted regarding educational matters. They have been generous in the past in voting bond issues that pupils might be well housed. Are they going to be less generous now and fail to provide a high type of personnel to utilize those facilities to the fullest extent? Do they understand that a reduction of salaries, even though temporary, may seriously cripple the schools for years to come? Has it been ascertained that the schools and politics are entirely separated, thus assuring 100 cents worth of educational results for every school dollar spent? Someone may suggest that caution and care must be exercised in such presentations to service clubs. Doubtless this is true, but the welfare of the children must not be sacrificed on any altar of politics.

This means that the school executive will aim to present before each service club each year as clearly and as concisely as possible a complete statement of the financial position of the school system. He will suggest that since education is public, the finances are likewise public and that the books should be open to the citizens for inspection at any time. His will be the policy of the open book. By such a presentation he can show the need for laws of tax equalization, so that one community will not have \$20,000 back of each pupil in high school while another in the same state has only \$2,000.

He will have the opportunity to suggest that there is far more to be taught in the public schools than the three R's. He will show how and why the curriculum has changed since the members were in school. He can show how to-day it is scientifically developed on the basis of need and that non-essentials are being eliminated except from those courses that are purely cultural. He will be able to show how the poor boy can obtain the kind of education he needs and he can suggest ways and means of further improving the schools. Of course, he can suggest that the public schools are for all the citizens of the community and that they should offer courses of interest to adults as well as basic courses for youth. He can suggest that any community can be as "fine and as beautiful as it wants to be, providing it is willing to pay the price." The citizens will have to decide and the school executive will then act in accordance with the adopted policy.

He can point out to the club members the need especially this year, for financial help for many pupils. Many clubs in the country have student loan funds. Many more could have them. Money is excellent for the good it can accomplish. How better could it be invested than in the education of enterprising young men and women?

Is educational opportunity provided for all the children of the community in accordance with their ability? Many years ago several clubs started work for the underprivileged children. Some centered chiefly on the crippled child while others worked with the blind, an example of how helpful clubs can be in providing medical treatment for handicapped children and in giving them special educational advantages.

Some communities have done exceptional work in discovering cases of illiteracy and in providing books and teachers for them. Eliminating delinquency, providing for leisure time activities and assisting in the development of character, are all a part of the work that clubs can perform in helping the schools to do their task more perfectly.

Setting an Example for the Young

The school man can point out to the club that it can perform excellent service in many simple ways. Influence on youth is a great thing. Each club member can set an example. He can help by being a leader in some extra-class activity for youth; he can help in problems of social adjustment; he can be a big brother; he can help develop a more cosmopolitan point of view. Personal conferences are often helpful. Youth seeks the guidance and advice of age. What a simple thing it is to be kind and give this advice in a friendly and tactful manner.

ALL-PURPOSE STEEL DESKS

for

STUDY HALLS

ART ROOMS

SCIENCE

HOME ROOMS

GROUP WORK

MUSIC . . . SIGHT-

SAVING CLASSES



Patented and Patents Pending
Henderson Sight-Saving
Ner-Far Flexible Top

Originally designed for Sight-Saving Classes, this modern desk is ideally equipped for sight preservation in ALL classrooms. Brings the work up to the correct angle and distance for the individual child's eyes. Eliminates eye fatigue—improves posture. Approved and in use by Sight-Saving Classes in

Cleveland,
Detroit,
Cincinnati,
Springfield, Ill.,

and many other cities. Recommended by national and many state sight-conservation societies.

Round steel construction protects clothes—more sanitary.
Finished in brown enamel to harmonize with wood parts.
All models furnished with wooden drawer, if desired.

THE THEODOR KUNDTZ COMPANY

Cleveland, Ohio

Please send complete information on your new Steel School Furniture line.

Name

Address

School City

NS-11-31



Steel Tablet Arm Chair
No. 503

Generous size, movable writing bed adjustable to height desired. Right front leg extends to give correct balance—prevents tipping.



Steel Study Top Desk
No. 631

Movable—adjustable. Deep saddle form-fitting seat discourages sliding forward. Curved back support is self-adjusting to suit the individual.



Steel Study Top Desk
No. 632

Spacious side compartment for books and materials. Large storage space underneath.

CAPS AND GOWNS FOR HIGH-SCHOOL GRADUATION



CAPS and Gowns have long been the symbol of learning. Hundreds of high schools are now using them for their graduating classes. The idea is particularly appealing from a standpoint of accomplishment for the school and economy for the parents of the students.

"The consciousness of equality at Graduation can be obtained by equality in dress"

5 REASONS WHY HIGH SCHOOLS should use CAPS and GOWNS!

FIRST. The ceremony is presented in the most dignified manner.

SECOND. The graduate is more deeply impressed with the importance of learning and inspired with the desire for higher education.

THIRD. Educators recognize the democratic advantages of uniformity of dress at graduation. The feeling of equality by all graduates, rich or poor, is attained by uniform graduation apparel. Caps and gowns will eliminate that undesirable competition in the matter of dress.

FOURTH. The adoption of caps and gowns by the school means a substantial saving to parents of the cost of an expensive graduation outfit for son or daughter.

FIFTH. The community will appreciate the school's effort to increase the value of the institution and assist parents in an economical way.

MYERS ADJUSTABLE CAP (fits any head)

Removes the big obstacle to the High School owning its own Caps and Gowns because one size fits all heads. The school need buy only the number of caps needed regardless of varying head sizes!

SEND COUPON TODAY

E. B. MYERS CO., 511 Venice Blvd., Los Angeles, Calif.

We are interested in the use of CAPS and GOWNS.

- ☐ Send complete information and wholesale prices.
☐ Send sample Cap and Gown for inspection.

Name..... Title.....
School..... Address.....
City..... State.....

News of the Month

Child Welfare Authorities Hold Meeting in Chicago

For two days, October 29 and 30, Chicago was the meeting place for authorities on child welfare, both national and local, in the Chicago Regional Conference of the White House Conference on Child Health and Protection. William J. Bogan, superintendent of schools, Chicago, was the chairman.

The program included an address by Ray Lyman Wilbur, secretary of the interior, who spoke by radio from Washington, D. C., in which he declared that child training must accord with economic changes, that youth must be educated to accommodate itself to the transition from an agricultural age to a machine age.

The school child naturally was the subject of many discussions. The contribution of the school to wholesome child development was discussed by Dr. John Dewey, Columbia University. Dr. Bert Beverly, Chicago, talked on psychiatric problems. Charles H. Keene, professor of hygiene, University of Buffalo, spoke on physical education in relation to a school health program, and Mary E. Murphy, director, Elizabeth McCormick Fund, Chicago, discussed a health education program for the school.

Many other notables took part in the carefully prepared and interesting program that was presented during the two-day meeting.

Educators Meet to Discuss Curriculum Revision

A conference of educators, including school superintendents, teachers in elementary schools, deans of teachers' colleges and others, was held under the auspices of the school of education of Northwestern University, Evanston, Ill., October 30 and 31, to discuss the reorganization and revision of curricula for public schools.

Among the principal speakers were Herbert B. Bruner, Teachers College, Columbia University, G. W. Willett, Lyons Township High School, La Grange, Ill., Will French, associate superintendent of schools, Tulsa, Okla., Harold O. Rugg, Teachers College, Columbia University, Prof. Leonard V.

Koos, University of Chicago, John E. Stout, dean, schools of education, Northwestern University, and Carleton W. Washburne, superintendent of schools, Winnetka, Ill.

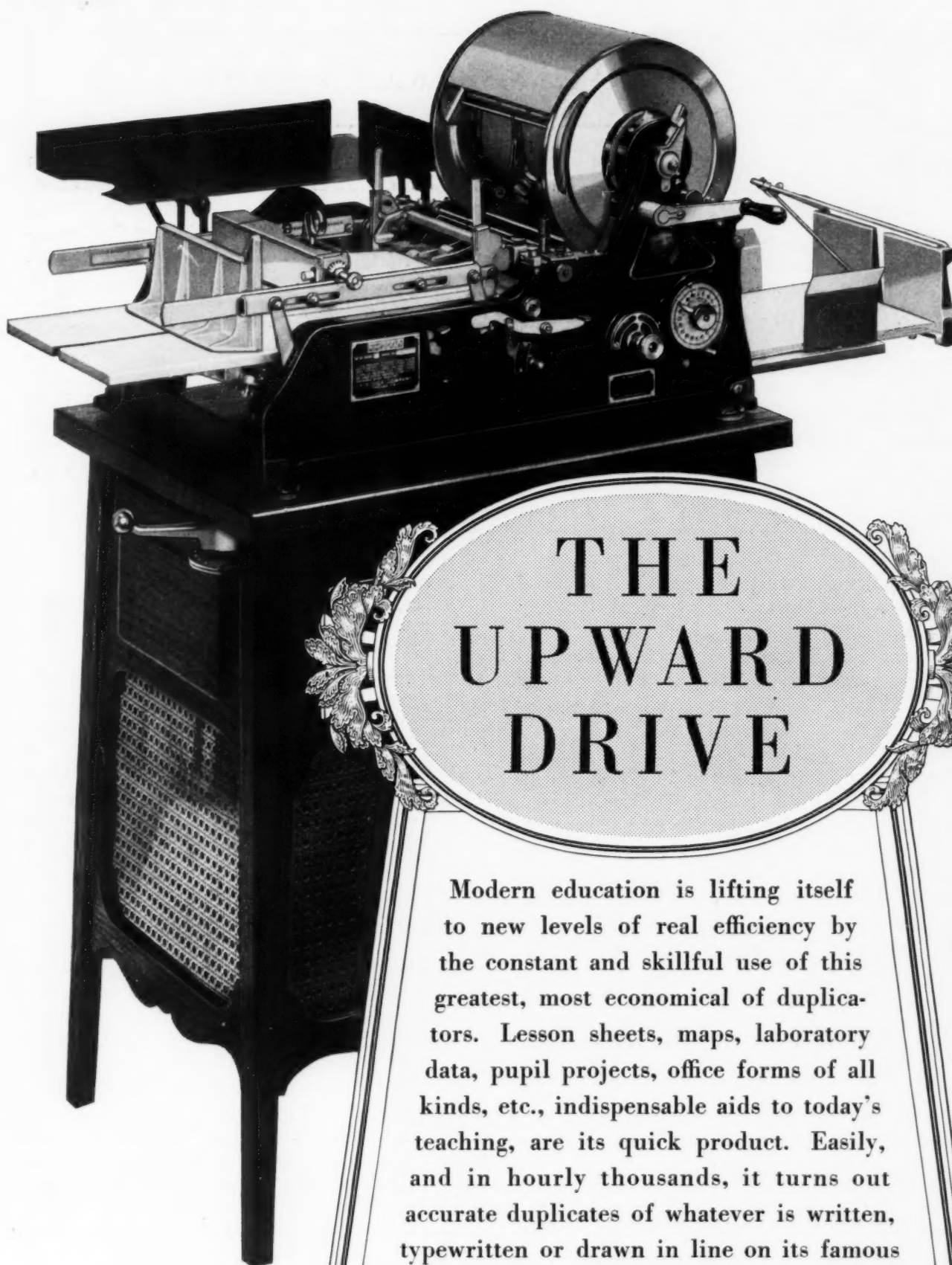
Dr. Albert E. Winship Is Honored by Fellow Educators

Albert E. Winship, dean of educational journalists, was honored recently at the National Education Association headquarters in Washington, D. C., before officers and representatives of the 220,000 members of the organization, by the pres-



entation of a fine oil painting of himself, which will remain permanently in the offices of the secretary of the association. This is the first time in the history of the association, organized in 1857, that such an honor has been accorded.

The painting was presented by the artist, Mrs. Donna Wilson Crabtree, who made the portrait as a recognition of Doctor Winship's services.



THE UPWARD DRIVE

Modern education is lifting itself to new levels of real efficiency by the constant and skillful use of this greatest, most economical of duplicators. Lesson sheets, maps, laboratory data, pupil projects, office forms of all kinds, etc., indispensable aids to today's teaching, are its quick product. Easily, and in hourly thousands, it turns out accurate duplicates of whatever is written, typewritten or drawn in line on its famous stencil sheet. Ask us for details. » » Address A. B. Dick Company, Chicago, or consult classified 'phone directory in principal cities.

UNION BUG
MIMEOGRAPH
CHICAGO

News of the Month (Cont'd)

New Research Division to Promote Broadcasting for Schools

Plans are now being formed to make the United States Office of Education the repository of all facts and theories on education by radio, according to Dr. C. M. Coon, specialist in this phase of research.

It is the aim of this division to collect any material or information dealing with broadcasting which is of educational nature, whether sponsored by private commercial stations or publicly controlled educational stations.

The Office of Education is primarily an information center. In sponsoring the new branch of research it is organizing an informational service.

In executing its task, the division will collect material and information on the whole scope of the subject. It will make this information readily available.

It is especially interested in keeping the educational and governmental interests of the country posted and alive to the importance of this new educational device.

Five methods will be used: conferences, public addresses, pamphlets, letters and articles in educational publications and the daily press.

Among other functions will be that of promoting research into radio as an educational agency in regularly organized schools and for adult students. It will attempt to prevent conflicts and duplication of effort between various interests. Here, it is hoped that unnecessary expenditure of money and effort may be eliminated.

On invitation of state departments of education, institutions of learning and national broadcasting chains, this division will assist in setting up and evaluating broadcast programs of educational material. Already its offices have been called on to assist in several important experiments and studies.

Educational Conference Held at the University of Kentucky

The eighth annual educational conference was held at the University of Kentucky, Lexington, October 30 and 31, with Dr. Frank L. McVey, president of the university, presiding at the opening meeting. Several nationally known educators

were on the program for the meeting, among them being Ernest Horn, dean, school of education, University of Iowa, Dr. Joseph Roemer, professor of education, George Peabody College for Teachers, Nashville, Tenn., Dr. William S. Gray, dean, school of education, University of Chicago, J. W. Gaines, president, Bethel Woman's College, Hopkinsville, Ky., Dr. Jesse E. Adams, professor of education, University of Kentucky, Mary Browning, supervisor of elementary schools, Louisville, Ky., Prof. J. B. Holloway and Prof. C. C. Ross, University of Kentucky, and Susan Elizabeth Miller, Lexington High School, Lexington, Ky. New emphasis in elementary, secondary and college education was the theme of the discussions that took place.

Three New Educational Surveys Are Under Way

Three more educational surveys, one of the public schools in Mississippi, the other two of schools in the Southern Appalachian Mountain region and Youngstown, Ohio, are now being made by the United States Office of Education, L. R. Alderman, chief of the service division, has just announced.

At the invitation of the Youngstown Chamber of Commerce and Board of Education, the Office of Education consented to make a study of the city's schools. Considerable information has been collected and actual survey work began in September.

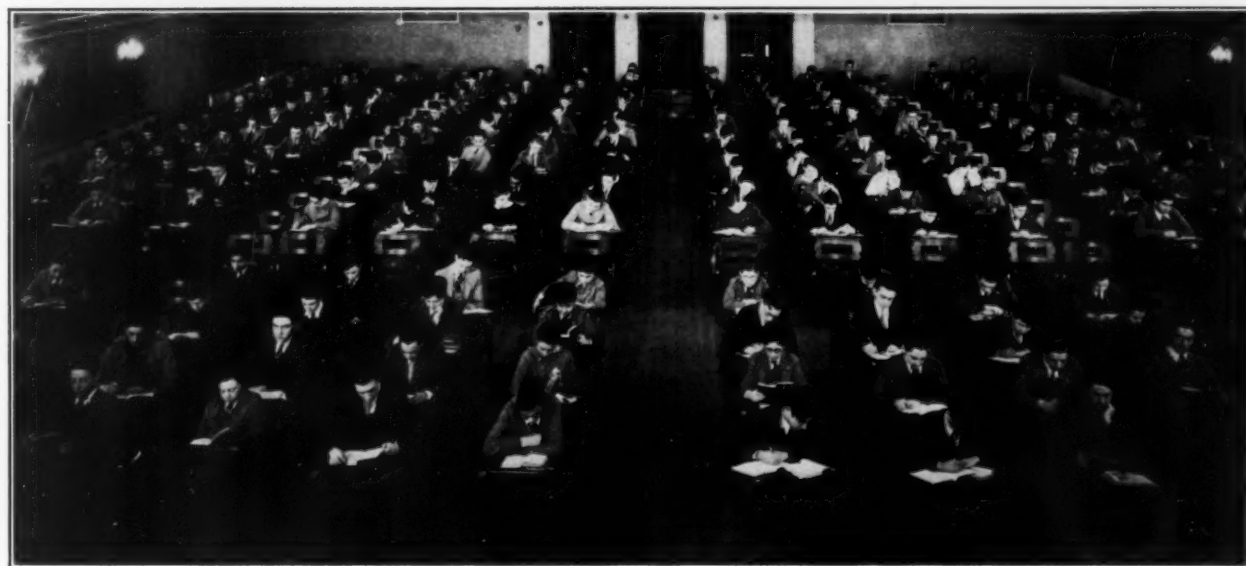
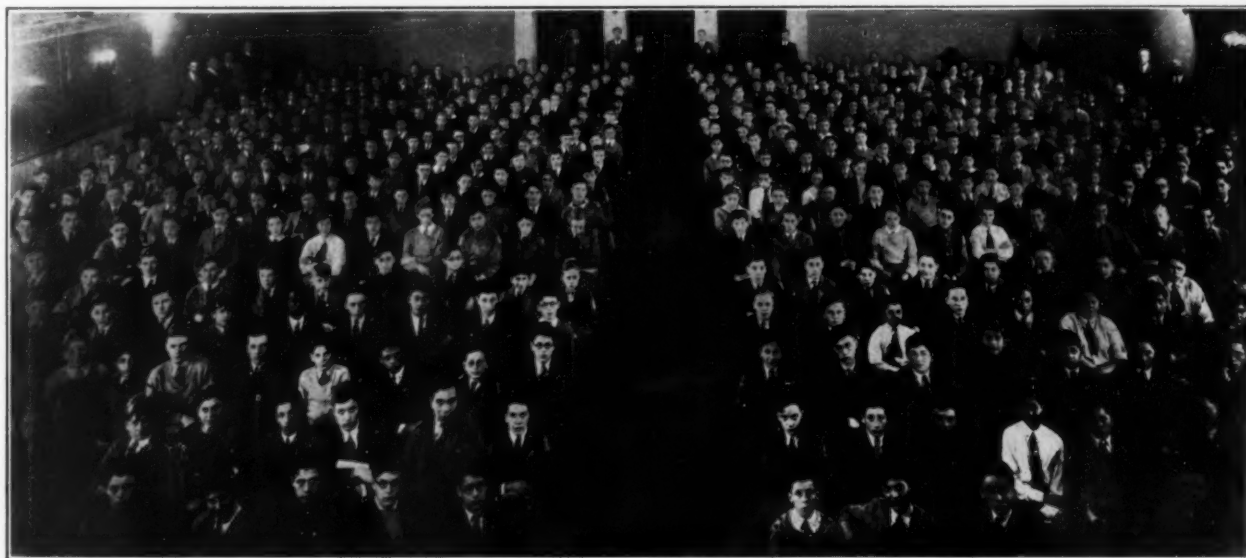
The Mississippi study is being made at the invitation of the Brookings Institution, Washington, D. C., and the state.

Early in 1931 the United States Department of Agriculture asked the Office of Education to cooperate in a social and economic survey of the Southern Appalachian mountain region, the office to be responsible for that part of the survey relating to education. Most of the work will be devoted to comparing information now available in the various states in the region and in the offices of the Government departments. It is contemplated that about three years will be required for the completion of this study.

Last year the Office of Education completed a survey of the public school system of Buffalo, N. Y., and in April a survey was made of home economics education in the junior and senior high schools of Montclair, N. J., with recommendations for curriculum revision.

These Photographs of the Same Room Were Taken Ten Minutes Apart

Two Hundred Boys Would Have Been Turned Away From Enrollment at This School Were It Not for Deskor Chair Installation



DESKOR CHAIRS in the Auditorium of the Public Latin School in Boston solve the important problem of taking care of two hundred more pupils. Every other chair is a "converter." When it is desired to change the Auditorium into a Study Hall, each "converter" is inverted, removed from its position as a chair and placed as a desk behind an adjoining chair. This action opens up small aisles, and a regular classroom formation is obtained instantly, as shown in the lower photograph.

The change is made in one minute by the pupils themselves. These photographs were taken ten minutes apart.

By utilizing this auditorium for study purposes six classrooms, formerly used as study rooms, have been liberated for recitation purposes throughout the day. Only two teachers are necessary to supervise the pupils as they study.

The equipment can be converted instantly into assembly formation, as shown in the upper photograph.

If you will send a diagram of an auditorium or classroom, with accurate measurements, we shall be glad to forward a layout for Deskor Chairs. Such action will involve no obligation whatever on your part.

DESKOR CHAIR SALES CORPORATION

New York Office: 2 West 45th Street

WILLIS DOANE RICH, President

Main Office: PARK SQUARE BUILDING, BOSTON

HILTON H. RAILEY, Vice-President

REGINALD W. BIRD, Treasurer

News of the Month (Cont'd)

National Advisory Committee on Education Completes Work

The National Advisory Committee on Education concluded its final session at the Department of the Interior October 6 after authorizing and directing the chairman, Charles R. Mann, to publish and submit to President Hoover its report and recommendations.

Doctor Mann in commenting on the sessions, which were executive, said the document should be in the hands of the President in a short time. The recommendations, he continued, are the result of careful investigation and conferences with the leading educators and those interested in education in the country. They represent what may be regarded as the most earnest and thoughtful suggestions on what should constitute the future relationship of the Government to education.

The concluding meeting brings to an end the committee which President Hoover appointed more than two years ago to study the whole relationship of the Government toward education and to make recommendations to guide future legislation.

University of Kentucky Dedicates New Library

The new \$400,000 library on the University of Kentucky campus was dedicated on October 23 with Dr. John H. Finley, editor, *New York Times*, as the principal speaker at the exercises. Dr. Frank L. McVey, president of the university, presided at the dedication.

Teachers Urged Not to Ask for Positions in Porto Rico

No applications for positions as teachers in Porto Rico will be received from residents of the United States until after January 1, 1933, the Department of War has announced.

The bureau of insular affairs of the War Department has been advised by the commissioner of education for Porto Rico that no applications for teaching positions in Porto Rico will be received by him from applicants residing in the United States until after January 1, 1933.

This action was taken by the commissioner as there are now on file in his office about 900 applications of eligible teachers from which to meet the prospective needs of the school year 1932-33. There was only one teacher appointed from the continental United States for the current school year.

Yale Plans to Spend \$22,000,000 in Construction During the Year

Within the next twelve months Yale University will spend about \$22,000,000 for new construction, according to a recent announcement. At present more than 2,200 persons are employed on university construction work. Including those employed in maintenance, the total force is 3,049. The monthly salary outlay for the work is around \$500,000.

Board Not Liable in Injuries to Pupil Football Players

Boards of education are without authority to recognize and pay damages, or doctor or hospital bills, for pupils injured in the playing of high school football games, as either legal or moral obligations, Gilbert Bettman, attorney general for Ohio, held in an opinion given to John K. Sawyers, Woodsfield, prosecutor of Monroe County, Ohio.

"Such a claim cannot be made on the basis of a moral obligation on the part of the school district for the reason that no relation exists between the board of education, or the school district, and the player who might have received an injury," the opinion said. "No legal claim would exist against the board even if the board were not protected by the rule that it is not liable in tort in any case for the reason that it exercises its functions in a governmental capacity as distinguished from a proprietary capacity. Even if the school were a private school and were not protected by the rule of nonliability in tort, the relationship between the player and the school authorities would not be such as to merit the imposing of a legal liability on the school for the injuries received by the player during the conduct of the game, the game being played independently of the school's supervision."

STANDARD OIL (OF OHIO) CHRYSLER (PLYMOUTH DIVISION) AND THE U.S. NAVY »



... LEARNED THE FACTS ABOUT 16mm PROJECTORS

WHEN Chrysler (Plymouth Div.), Standard Oil (of Ohio), 36 U. S. Navy Recruiting Stations, Standard Brands, Inc., Ward Baking Co., Corporate Trust Shares, and numerous other equally prominent users Standardized on VICTOR 16mm MOTION PICTURE EQUIPMENT, it was not because they merely **thought** Victor equipment was best. . . .

It was because the most rigid of competitive tests proved conclusively that Victor 16mm Products have no equal for COMPLETENESS, SIMPLICITY and FINER PERFORMANCE!

The fact alone that Chrysler's initial order for 38 equipments was followed by a second order for 30 more VICTORS is somewhat indicative of the calibre of PERFORMANCE one may expect from a Victor Product.

Shrewd buyers in the educational field have likewise turned to VICTOR. Numerous Victor Projectors are in use by the school systems in New York City, Washington, D.C., Chicago, Los Angeles, Kansas City, Philadelphia and Detroit—not to mention the hundreds owned by individual schools thruout the country.

Ask for literature describing the Exclusive Features which have induced Industrial and Educational leaders everywhere to Select VICTOR 16mm Motion Picture EQUIPMENT.



CINE-CAMERAS by VICTOR are built in two Models—the Model 5 with full-vision visual focusing, 3-lens turret, 5 operating speeds, and many other famous VICTOR features—the popular, moderately priced MODEL 3 has normal, quick-action and S-L-O-W motion speeds; equipped with high quality, 1 in. focus f/3.5 lens.

VICTOR CINE-PROJECTORS embody all latest projection refinements and conveniences—several important features available in no other equipment—accommodate all regular and high intensity projection lamps, including 250 W.-20 V., 375 W.-75 V., and 165 W.-30 V.

The **ANIMATOPHONE** is the only self-contained, especially designed 16 mm. instrument for sound and picture synchronization. No other portable equipment embodies the notable features responsible for its visual and phonetic excellence. See and hear the ANIMATOPHONE.

FREE—Write for your copy of the Victor Film Directory which tells "Where to Buy, Rent and BORROW" 16mm Silent and Talking Films.

SELECT VICTOR 16mm MOVIE EQUIPMENT

**SOLD THE WORLD OVER
VICTOR ANIMATOGRAPH CORP'n
DAVENPORT, IOWA, U. S. A.**

(U.S. Distributors—Theatrical Division, NATIONAL THEATRE SUPPLY CO.)
FACTORY SERVICE & SALES BRANCHES IN 31 PRINCIPAL U.S. CITIES

News of the Month (Cont'd)

Radio Council Sponsors Series of Educational Programs

President Nicholas Murray Butler of Columbia University, President James R. Angell of Yale University and Dr. Ernest L. Bogart, president, American Economic Association, inaugurated on October 17 a weekly program of radio addresses on present day economics and psychology, sponsored by the National Advisory Council on Radio in Education. President Butler delivered a fifteen-minute introductory address, preceding President Angell, who opened the series of psychology programs, and Doctor Bogart, one of the contributors to the economics series.

These lectures will be the first programs on academic subjects to be sponsored by the National Advisory Council on Radio in Education and broadcast to a nationwide audience. The council was organized over a year ago to further the art of radio broadcasting in American education.

The programs will be on the air Saturday evenings from 8:30 to 9 o'clock Eastern standard time and each broadcast will be divided into two fifteen-minute periods so that an address in each series may be presented every week.

There will be thirty lectures in each series. The first ten addresses in the economics series will deal with the causes of the economic depression and possible ways out. Unemployment insurance, national economic planning, the merger movement and other problems of modern economics will be discussed in future lectures. The series on modern psychology will cover such subjects as child development, adult learning, changes in personality, animal behavior and the social and industrial implications of scientific psychology.

Denver Schools to Give \$100,000 to Unemployment Relief

The 2,400 employees of the Denver Public Schools, Denver, Colo., have unanimously voted to give the sum of \$100,000 to the relief funds of Denver during the next six months.

Teachers, principals, custodians, lunchroom employees, nurses, clerks, secretaries, directors and administrators—in fact, every employee of the school system—will contribute to the fund. The amount of each contribution will depend upon the

salary of the individual concerned. The school staff has worked out a graduated scale for these contributions ranging from 2 to 8 per cent of six months' salary (or 1 to 4 per cent of one year's salary). Persons receiving less than \$1,000 a year will probably give a flat sum of \$5 each.

The money will be paid in installments over a period of six months. Payments will begin November 1.

One-fourth of the sum to be raised, or \$25,000, will go to the community chest, and three-fourths, or \$75,000, to the unemployment relief fund. The sum to be given the chest will exceed the 1930 contributions made by school employees by about \$7,000.

E. C. Glass, Lynchburg, Va., Dies—Superintendent Fifty-Two Years

Edward Christian Glass, superintendent of schools, Lynchburg, Va., for fifty-two years, died on October 26 after an illness of several months. Mr. Glass, who was a brother of Senator Carter Glass, was one of the original teachers of the public schools when they were established by the state in 1871 and he was next to the last survivor of a staff of twenty pioneer teachers.

Chicago Starts Thorough Survey of Its School System

A complete survey of the Chicago school system has been started, according to a recent announcement. The survey is being made under the direction of Dr. George D. Strayer of the Institute of Educational Research, Columbia University.

The purpose of the survey, according to Mrs. W. S. Hefferan, trustee, is to ascertain just how Chicago can get the most for every dollar spent for education. The survey will include investigation of wastage in every department, business and educational, with suggestions for revision. Buildings, contracts and school lands will be given especial scrutiny. Completed, the report is expected to form a basis for the ultimate solution of the school situation.

The survey will cost an estimated \$100,000. It is expected to be completed by June 1.

Reduce Soap Costs

*Take advantage of our
Nation-wide School Service*

SUPERINTENDENTS: Let one of our experts show you how to save money by ordering your cleansing supplies in accordance with a carefully planned buying program.

Without obligation he will show you wherein you can effect economies by eliminating waste and by group purchases. Hundreds of superintendents have found it pays to have all their soap transactions handled by this one organization that makes scientific soaps for every purpose. Soaps that do their work better, easier, quicker, because they are the result of more than 125 years' soap-making experience.

For an appointment with one of our school maintenance experts or for further information on any of our soap products please write to us.

COLGATE-PALMOLIVE-PEET CO.

Palmolive Building, Chicago, Ill.

JERSEY CITY JEFFERSONVILLE MILWAUKEE
KANSAS CITY BERKELEY

**"... can't hear myself
THINK!"**

Shouting from the gym . . . pounding from the manual training room . . . noisy, marching feet in corridors . . . classroom confusion . . .

Acousti-Celotex sound absorbing tiles subdue this racket. Thousands of schools have proved the remarkable effectiveness of Acousti-Celotex in absorbing noise and correcting acoustics.

Acousti-Celotex is paintable and therefore permanent. Quickly applied to ceilings in old or new buildings. Decorate the same as plaster, with any type of paint.

Estimates furnished without cost or obligation. Write to The Celotex Company, 919 N. Michigan Ave., Chicago, Illinois. Sales distributors throughout the World.

ACOUSTI-CELOTEX
CANE FIBRE TILE
For Sound Absorption

Puritan
TRADE MARK

*Forged Steel
Scissors*

Scientifically Hardened and Tempered Blades, For Life-Time Cutting

Schools are enthusiastic in praise of these smooth and easy-cutting scissors. Made of genuine solid steel, fully nicked. Accurately assembled with steel screw to keep the blades in proper alignment. Special drop forging, heat tempering, and grinding assure lasting service so essential in school work. Every pair fully guaranteed.



**SUPERINTENDENTS AND
PURCHASING AGENTS:**
Specify "Puritan" Brand
if you want reliable scissors
at low prices. Samples
and prices will be sent
through responsible
school supply jobbers.

The Acme Shear Corporation
BRIDGEPORT, CONN.
Famous Since 1874

970 hours of
THIS . . .
485 hours of
THIS . . .



*have you ever stopped to realize
what it does to your students?*

IN the average school year, the average child spends 970 hours at his desk, of which about 485 hours are devoted to reading! Hours that mould students mentally . . . and physically as well.

The gymnasium and play period can not overcome the physical disabilities resulting from continual stooping over and slumping in school seats. Educators are beginning to realize this. Correct seating is also a factor in sight conservation. That is why so many schools are adopting the American "all-purpose" Universal Desk illustrated to the left.



It is not only the most scientifically correct posture desk on the market today, but serves as well, six distinct classroom purposes. You should know this desk—the features that make it so outstanding. The facts are available. Address Department NS11 please.

American Seating Company



*Makers of Fine Seating for Schools,
Churches and Public Auditoriums*

GENERAL OFFICES: GRAND RAPIDS, MICH.
Branches in All Principal Cities

News of the Month (Cont'd)

Southern Educators to Meet December 14 and 15

Dr. William John Cooper, U. S. commissioner of education, has called a conference of educators of fourteen Southern states to discuss problems relating to the improvement of instruction in rural schools, according to announcement by the Alabama Department of Education.

The meeting is to be held in Montgomery, Ala., on December 14 and 15, and will bring together state and county supervisors, county superintendents, school principals and those engaged in teacher training in the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia and West Virginia.

Boston School Superintendent Dies Suddenly

Jeremiah E. Burke, superintendent of schools, Boston, died suddenly on October 29. He was apparently in good health and had attended to his office duties the previous day.

Doctor Burke had served the schools of Boston administratively for twenty-five years—fifteen years as assistant superintendent and ten years as superintendent. He had served also as superintendent of schools in Waterville, Me., Marlboro, Mass., and Lawrence, Mass.

He was sixty-four years old.

Office of Education Appoints Research Specialist

Dr. David Segel, who has been in the research department of the Long Beach City Schools, Long Beach, Calif., for the last seven years, has recently been appointed to the position of specialist in educational tests and measurements in the research and investigating division, Federal Office of Education.

It will be the duty of the new education specialist to conduct studies concerned with the construction and evaluation of tests and measures of pupil progress, efficiency of teaching and adequacy of the school program; to administer measurement

programs, interpret results, make administrative adjustments and curriculum changes based on results of testing programs and cooperate with bureaus of research in city school systems, other research agencies and individuals in making studies in this field. Doctor Segel will also organize and conduct an information service for school officials and others interested in problems of tests and measurements. He will advise and assist school officials in surveys or studies of school systems, and assist in such surveys conducted by the Office of Education.

Columbia University Plans New Type of Teachers' College

Teachers College, Columbia University, announces a plan for a new type of teacher training institution to open September, 1932. It will operate as an undergraduate unit at the college level.

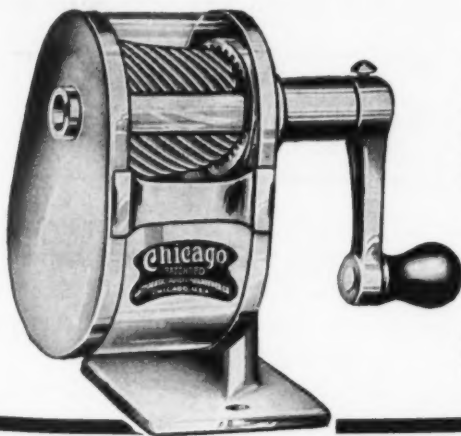
This new college, to be under the direction of Dr. Thomas Alexander, professor of education, Teachers College, will attempt to demonstrate radically different methods in the selection and training of young men and women who are to become teachers in nursery, elementary and secondary schools. While preparing these young people for teaching positions the new unit, which will grant the bachelor of science and the master's degrees, will operate also as a demonstration college in which graduate students in Teachers College may observe improved methods in teacher training.

Rigid methods of elimination will be used in the selection of students. High school and college executives throughout America will be asked to cooperate in selecting those who show the richest promise of developing into highly competent teachers and educational leaders.

This unusual care in creating the student body, to be limited the first year to 100 young men and 100 young women of outstanding ability and personality, will be taken because it is felt that mediocrity is to-day the curse of the teaching profession.

The duration of the period of study in the college will vary approximately from three to five years according to the ability of the student.

Cost of attendance at the college probably will not exceed \$1,000 a year. It is hoped that a number of scholarships may become available for unusually promising young men and women.

**CHICAGO**

A sharpener for standard size pencils only, stops cutting when the proper point is produced.

A Model of fine quality at the lowest price.

Modern School Standards require a Pencil Sharpener in each Classroom

"APSCO"**AUTOMATIC PENCIL SHARPENERS**

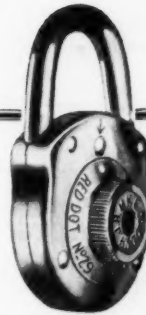
Generally preferred by Schools because they are safe for children's use—because they assure cleanliness—because they are economical—because they are time savers—because they raise the efficiency level of students and aid in forming helpful habits.

All "Apsco" Models have hardened, high-test steel cutters deeply undercut and hollow ground to a razor edge.

They Don't Scrape—They Cut

Select the "APSCO" models best suited to your needs from your School Supply House or Stationer—Catalog on Request.

AUTOMATIC PENCIL SHARPENER CO.
Chicago, Illinois



Let Red Dots Solve YOUR LOCK PROBLEMS . . .

If you're a principal worrying how to keep students from "feeling out" others' combinations and getting into their lockers—
If you're a gym teacher or coach bothered by individuals breaking into the teams' lockers and stealing athletic equipment—
If you're a custodian at his wits' end to prevent pupils "setting" locks and opening their neighbors' lockers—

INSTALL THE NEW MILLER RED DOT KEYLESS PADLOCKS

Millions in daily use are proving they are the most highly developed institutional locks in the world. Complete Service Record goes with each installation.

(If your local dealer cannot supply you, write us)

**THE J. B. MILLER KEYLESS
LOCK CO.**

LOCK ST.

KENT, OHIO

COMBINED WOOD AND STEEL Stronger Than Any Other Chair Made!



SOLID KUMFORT AND
PRESS-TOE LOCK

**FOLDING
CHAIRS**
*for Every
Purpose!*

Ideal for School Auditoriums and Classrooms. Splendid Appearance. Finest Quality Throughout. Outlast and Outperform Any All Wood or All Steel Chair Made. Write for Folder. Also Ask About Our Tab-L-Arm Folding Classroom Chairs.



LOUIS RASTETTER & SONS CO.
1404 WALL ST., FORT WAYNE, IND.

LAWLOR FLOOR CLEANING EQUIPMENT

**WRINGERS****MOPPING
TANKS****ELECTRIC
SCRUBBING MACHINES**

Cleaner—More Sanitary floors for Schools. Leading Schools and Universities throughout the country are installing Lawlor complete Floor Cleaning equipment, because by comparison, it is the most modern and efficient.

The Lawlor Method is the result of 32 years of experience and enables three men to do the work of five in the same time.

Lawlor All-Steel Perforated Roll Wringers are built in single and twin pail types.

Lawlor All-Steel Mopping Tanks are made in sizes to meet every requirement, 25-30-60 and 65 gals. They have separate compartments for soapy and clear water, an easy operating foot or hand wringer and all the latest improvements.

THE LAWLOR ELECTRIC MACHINE Scrubs—Waxes—and Polishes. It is of the most advanced design and guaranteed construction and built in various sizes to meet most efficiently every floor maintenance problem.

Let us prove the real merit of the Lawlor Method by actual test on your floors and under your own supervision. Interesting literature with complete details of this "Service Test" plan will be sent on request.

S. C. Lawlor Co.

132 N. Curtis St.
CHICAGO, ILL.

SOLD AND SERVICED BY LEADING DEALERS

News of the Month (Cont'd)

Plan Is Offered to Improve Rural Education

The small rural high school trails far behind the big city sister high school in its contribution to education, according to a bulletin issued by the Office of Education. More than 14,000 rural high schools of 250 enrollment or less were studied for the report, which found the spread of weak secondary schools in country regions actually delaying the progress toward better educational advantages in the United States.

Many small high schools have sprung up in sparsely settled regions—some with from thirty to fifty pupils and with as few as two teachers. The teacher may be required to give instruction in a dozen different subjects, in some of which he is poorly qualified; thus his pupils get a low grade of training. He is overworked, naturally. The city school has attracted the better prepared teachers with more pay and more leisure so the country high school usually gets the leftovers. The course of study also suffers.

Remedies for this serious situation offered by the Office of Education are: first, the careful study by each state of its rural school situation; second, cooperation among all Government and social agencies with a view to school consolidation and the conversion of some small senior high schools into junior high schools; third, the employment at good salaries of teachers who are experts in special subjects, to cover several schools in a district, or the wide use of correspondence courses under competent supervision.

Bills to Raise School Age Fail in the States

Compulsory school attendance age was not raised in a single state during their legislative sessions this year although bills for this purpose were introduced in many states, according to information received by the Children's Bureau from the National Child Labor Committee which has just issued a summary of new state child labor legislation.

Although some legislation will tend to keep children in school a little longer and away from unsuitable employment, nevertheless, Courtenay Dinwiddie, general secretary of the committee

which conducted the survey, asserts that "much more vigorous measures are necessary if we are to keep another 100,000 children under sixteen years of age from entering the labor market in competition with adult labor."

Unless the age at which children are allowed to leave school for work can be raised to sixteen years (or at the very least to fifteen years) in the near future, it will not even be possible to prevent an increase, perhaps on a large scale, in the number of young children competing with adults.

Aviation Courses Are Popular in High Schools of Buffalo

Successful high school aviation courses in Buffalo, N. Y., have attracted 400 pupils in day and night classes, and their popularity is so great that accommodations cannot be provided for hundreds of other youths seeking entrance, the United States Office of Education has announced.

The courses are four years in length, include modern equipment and all necessary facilities from aircraft construction to air navigation. Forty fliers have been trained by three flying clubs of the school since 1927.

Aviation is taught both day and night in the Burgard Vocational High School.

No State Aid for Arkansas County Schools This Year

G. C. Floyd, deputy state commissioner of education in charge of administering the state equalizing fund for the public schools of Arkansas, has announced in letters sent to county superintendents of schools that no funds will be available from the equalizing fund to aid schools during the year 1931-32.

He advised in a letter to school heads in each of the seventy-five counties of the state that the unpaid balance allotted to schools for 1930-31 cannot be paid until collection of the 1931 income tax is completed May 15, 1932.

Sixty-five per cent of the allotments for 1930-31, or \$902,989.87, has been distributed to schools during the present year, leaving \$490,294 as the unpaid balance due several hundred school districts which qualified for aid from the fund.

BROWNE WINDOWS Throughout



Lowville Academy & Union Free School, Lowville, New York.
A. F. Gilbert, Architect.

Cleaned from Inside Safely and Economically

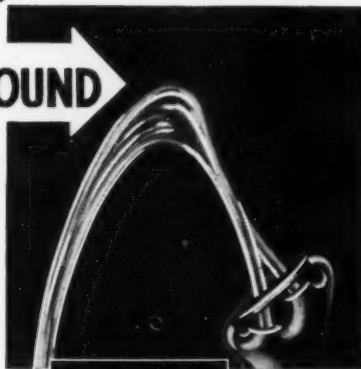
They assure Perfect Ventilation; Maximum Light and Vision; Absolute Weather Protection; Elimination of Street Noises When Closed; Easy Operation; Continuous and Lasting Service; No Depreciation; Fuel Saving and Minimum Maintenance Costs.

Built of Copper Bearing Steel, Extruded Architectural Bronze, and Aluminum Alloy

RICHEY, BROWNE & DONALD, Inc.
52-15 Flushing Ave., Maspeth, N. Y. City

Note the DRINKING MOUND

It is a distinguishing and an exclusive feature. The two-stream projector provides a localized drinking mound, practical, sanitary and convenient to drink from under all conditions.



Illustrated . . .
a popular wall
fountain . . . a
semi-recess type
with glass filler.



The HALSEY
TAYLOR two-
stream projector

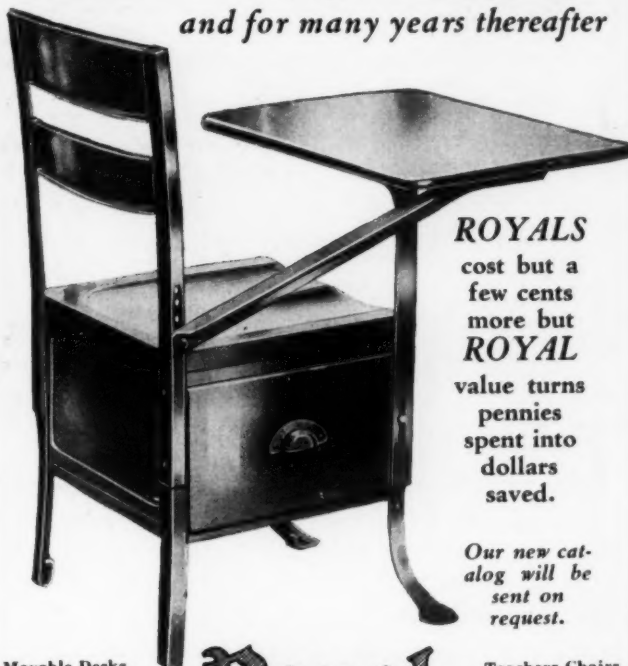
Sanitation Assured

Because Halsey Taylor Drinking Fountains assure maximum sanitation, they are the preferred specifications for schools, hospitals, and for public buildings everywhere. A wide range of practical designs to fit varied needs and expenditures.

The Halsey W. Taylor Co., Warren, O.

HALSEY TAYLOR Drinking Fountains

PRICE is what you pay TODAY
VALUE what you get TOMORROW
and for many years thereafter



ROYALS
cost but a
few cents
more but
ROYAL
value turns
pennies
spent into
dollars
saved.

Our new cat-
alog will be
sent on
request.

Movable Desks
Folding Chairs
Tablet Arm Chairs
Kindergarten Chairs

Royal

Teachers Chairs
Sewing Room Chairs
Typewriter Chairs
Steel Stools

ROYAL METAL MFG. CO., 1134 S. Michigan Blvd.
CHICAGO, ILLINOIS

Royal Distributors Are Located in 38 States

New DUDLEY AUTOMATIC is a Great Development

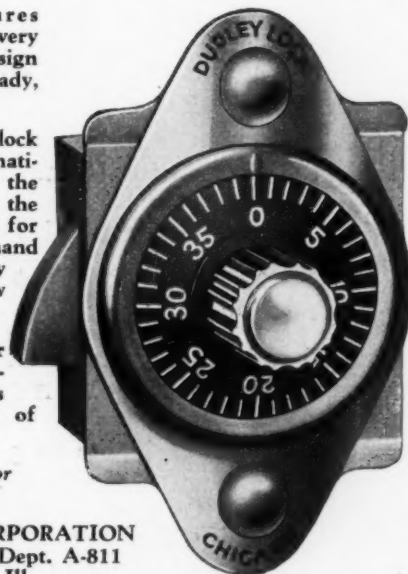
Tested strength assures ample protection for every locker. Simplicity in design and few parts mean steady, long-time operation.

This new built-in lock will lock itself automatically when you close the door. It is known as the A-L-2 and can be had for either right or left hand locker doors. . . . Easily installed on old or new lockers.

If you have a locker problem, write for information to the world's largest manufacturer of combination locks.

Sample lock sent for
free examination.

DUDLEY LOCK CORPORATION
26 N. Franklin St., Dept. A-811
Chicago, Ill.



**DUDLEY
LOCKS**

In the Educational Field

HUGH J. MOLLOY, superintendent of schools, Lowell, Mass., has announced that he will retire in June, 1933, under the pension law. He will be seventy years old at that time and will have served as head of the Lowell schools for more than twenty years.

CLARENCE E. HOWELL has been transferred from the position of vice-principal of the Trenton Senior High School, Trenton, N. J., to the post of director of research in the school system.

ARTHUR B. MOEHLMAN, professor of school administration and supervision, school of education, University of Michigan, will be on leave during the second semester. He will travel in the Southwest studying the public school systems of that section. His headquarters will be at Tucson, Ariz.

C. L. CUSHMAN, formerly assistant superintendent of schools, Oklahoma City, Okla., has been appointed director, department of curriculum, Denver Public Schools, Denver, Colo. He succeeds ARTHUR K. LOOMIS who has accepted a position with the University of Chicago.

PAUL L. ESSERT has been named supervisor of high school instruction, Denver Public Schools, Denver, Colo. MR. ESSERT was formerly principal, Fort Collins High School, Fort Collins, Colo.

C. W. CRANDALL, superintendent of schools, Monroe, Mich., was elected president, Conference of City Superintendents, at the annual meeting held in Traverse City, Mich.

L. W. FEIK has succeeded the late M. G. CLARK as superintendent of schools, Sioux City, Iowa.

PAUL R. BAIRD, high school principal, Ludlow, Mass., has been named superintendent of schools in that city, succeeding RICHARD D. TUCKER.

W. E. LAMSON is the new superintendent of schools, Scammon, Kan.

LONNIE K. WOOD, formerly principal of the elementary schools, Altamont, Kan., is the newly elected superintendent of public instruction, Labette County, Kansas.

C. E. BIRCH, who has been serving as acting superintendent of schools, Lawrence, Kan., has been elected to the superintendency.

LYNN E. CASTLE, superintendent of schools, Stuart, Iowa, for the last eight years, is now serving as principal of the intermediate school, Riverside, Ill.

WILLIAM WALLACE ANDREWS, a school teacher for fifty-six years, and principal, Butler Grammar School, Portland, Me., for forty-two years, died recently. MR. ANDREWS was widely known in Maine educational circles.

L. D. SHUTER has been appointed assistant superintendent of schools, Columbus, Ohio.

H. R. MCVAY, formerly superintendent of schools, Athens County, Ohio, died recently. MR. MCVAY had been active in Ohio's educational affairs for more than forty years.

CLARENCE HODGE succeeds E. S. DENISON as superintendent of schools, Lake Geneva, Wis.

FRED A. SEAMAN is the new superintendent of schools, Onaga, Kan. He was formerly principal, Seaman Rural High School, Seaman, Kan.

FLOYD G. BETTS is now serving as superintendent of schools, Wharton, Tex. He was formerly principal of the high school, Palestine, Tex.

TRACY F. TYLER, formerly superintendent of schools, Benedict, Neb., has been appointed executive assistant to JOY ELMER MORGAN, National Education Association.

R. C. FINLEY succeeds the late C. E. WATERSON as superintendent of schools, Hiawatha, Kan.

H. C. ROBERTS is the newly elected secretary and business manager of the board of education, Sioux City, Iowa.

C. M. HIRST has resigned as superintendent of public instruction for Arkansas and is now serving as commissioner of education.

FRANK W. CYR, formerly superintendent of schools, Chappell, Neb., has been named associate in rural education, Teachers College, Columbia University.

WALTER ERNST, formerly superintendent, Bayard Consolidated School, Bayard, Iowa, has accepted a position as teacher in one of the high schools of Chicago.



LEADERSHIP *in* Unit Heating and Ventilating

LEADERSHIP in the development of Unit Heating and Ventilating systems is a Buckeye characteristic. The new "900" Series Buckeye HEAT-O-VENT is another distinct step in advance. More compact in its space requirements; simpler and more accessible in its construction; extremely economical in operation; self-protected against freezing. Supplies fresh air—filtered, warmed and diffused without drafts—to each room as a unit. Automatically maintains both volume and temperature. Write for Bulletin Number 124.

MAIN OFFICE
AND FACTORYCOLUMBUS
OHIO

Sales and Service Offices

Atlanta	Detroit	Minneapolis	St. Joseph, Mo.
Baltimore	Grand Rapids	New York City	Salt Lake City
Boston	Harrisburg	Newark, N. J.	St. Louis, Mo.
Buffalo	Hempstead, L. I.	Philadelphia	Seattle
Chicago	Indianapolis	Pittsburgh	Syracuse
Cleveland	Kansas City	Portland, Ore.	<i>In Canada</i>
Dallas	Los Angeles	Reno, Nev.	Toronto, Ont.
Denver	Milwaukee	Richmond, Va.	Youngstown

A Challenge to the World in perfect reproduction of SOUND...IN PORTABILITY ...IN PRICE

The HOLMES Sound-On Film Portable Projector is available at a price within the reach of all.

\$675

The lightest, most compact, simplest to operate projector ever built.

HOLMES silent Projectors now in use can be equipped for sound-on film at small cost.



Weight
only
57 lbs.

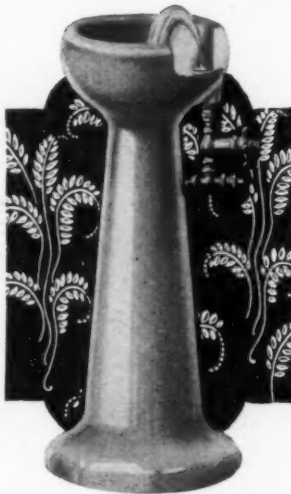
The HOLMES needs no introduction. It is known and used the world over. Write for full information.

HOLMES PROJECTOR COMPANY
1810 Orchard Street, Chicago, Illinois

Eliminating Health's Hazards

The drinking fountain is the common meeting place. Therefore it is humanly economical to install the Rundle-Spence... the fountain with unusual sanitary advantages.

The R-S Vertico-Slant fountain design makes it impossible for the user to touch his or her lips to the nozzle. Water spouts slantingly from jet to mouth, the excess falling into the bowl and not on the jet. Only the R-S fountains have Vertico-Slant health guarding features.



R-S water fountains come in white, green, blue or any color you choose. Write for our catalog.

RUNDLE-SPENCE MFG. CO.

438 NO. FOURTH STREET, MILWAUKEE, WISCONSIN

RUNDLE-SPENCE

LIPS CAN NOT TOUCH THE R-S NOZZLE



ENLIST THEIR INTEREST by getting them out from behind the geography text book now and then!

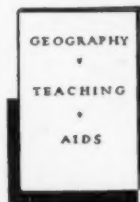


ALL geography teaching must follow the geography text. But progressive teachers don't keep pupils' heads buried in it *all* of the time. They make liberal use of maps. That helps pupils visualize what they read in the text. Makes the subject far more fascinating. Drab facts spring to life. Major points are driven home. Fundamentals clarified. Pupils discover causes, make comparisons, note likenesses and differences, prove statements, investigate results, and thus form judgments.

Include map activities in your daily geography lessons. But be sure and use *good* maps. Maps built for classroom needs—not for manufacturing convenience. You may be certain you are using the best maps the market affords when you use Weber Costello Political and Combination Political-Physical Maps. No matter what your teaching plan may be, these Maps ideally meet your every need.

Free Geography Teaching Aids

If you teach or direct the teaching of Geography, send for this helpful booklet. You will be delighted with its wealth of teaching aids. Single copies are free. Just address Dept. M1121.



Weber Costello Co.
Chicago Heights, Illinois

Makers of STERLING LIFELONG BLACKBOARD, OLD RELIABLE HYLOPLATE, VELVASTONE, GLOBES, MAPS, ERASERS, CRAYON

Your School— Its Construction and Equipment

A Department Conducted by CHESTER HART, B. Arch., Chicago

Improved Lighting Fixtures That Will Benefit the School

Although the problem of diffusing light without great loss of illumination has always been acute, with the large wattage of electric bulbs demanded by the increased amount of light desired in classroom illumination, the diffusion of lamp filament and fixture shadows has become even more important.

The one-piece enclosing globe for semi-indirect lighting, with a minimum of depreciation and maintenance, has proved to be the most satisfactory type of fixture for uniformity of lighting.

These globes have been blown of a uniform color and density, and an enamel coat has been fired on the lower portion to give greater softness and diffusion to the direct light, while it allows a greater quantity of indirect light to be thrown up-

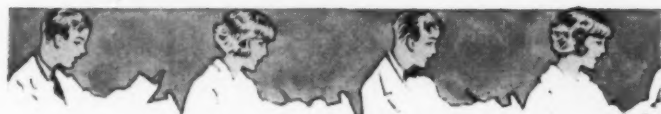
ward to the ceiling. The applied enamel coat, which is not an integral part of the fixture, catches more dust and is harder to clean than a smooth glass surface.

The Macbeth-Evans Glass Co., Charleroi, Pa., has a technique for glass blowing that allows glass of two densities to be blown in such a way that the entire globe is a single homogeneous piece. In Galax globes the lower part is a dense white reflecting opal glass, to eliminate glare and reflect light to the ceiling. The upper part is of lighter density, that is, it is sufficiently diffusing to prevent filament shadows and reflections, while at the same time it maintains a high coefficient of efficiency for the indirect rays. This new type of globe should reduce the frequency of cleaning necessary to maintain lighting efficiency. The deterioration of the globe itself will be negligible.

Another change that is being made in the Mac-



One-piece enclosing globes provide well diffused lighting for this classroom in the Prattsville School, Chelsea, Mass.



Give them Sunlight without Eyestrain

GOOD classroom lighting is an aid to pupil progress. Bad lighting a detriment—a strain on pupils' eyes. The ideal classroom shade is the Draper ADJUSTABLE Shade. It may be drawn upward or downward from the center. That means pupils get the valuable top light, recognized as the best light, from the upper third of the window. This feature is also an aid to proper ventilation. Windows may be lowered from the top, letting in draftless air without flapping of shades to distract.

Draper Shades are made of Dratex Cloth. This is a specially manufactured fabric that lets in sunlight, but modifies and diffuses it to eliminate all glare. Ordinary shades shut out sunlight. Thus pupils get the full benefit of light from the sun's rays with no danger to eyes. Equip your school with Draper Shades. Interesting literature and sample of Dratex Cloth (taken right from stock) sent free to educators. Please address Department NS.



**Luther O. Draper
Shade Co.**

Makers of Better Shades for
Over a Quarter Century

Dept. NS

SPICELAND INDIANA

Authoritative Advice on Stage Problems

The stage problems encountered by the Non-Professional Dramatist usually have their beginning with poorly constructed or improperly arranged stage equipment.

A minor change or arrangement in equipment may correct such problems. For practical suggestions and honest help, come to headquarters where advice bears the authority of 16 years' experience in building practical and trustworthy proscenium apparatus.

Every person interested in Dramatics should have this interesting booklet, "Stagecraft for the Non-Professional Drama." Crammed full of helpful advice. Write for it.



Vallen Electrical Co., Inc.
Akron Ohio

VALLÉN

DARES TO GUARANTEE



RIDE YOUR
FURNITURE
ON

SPRING-KUSHION GLIDES!

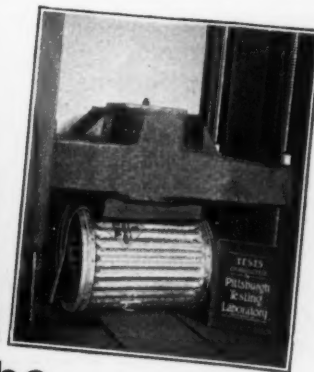
- Save Wear and Tear . . . on chairs, tables, floors and nerves •

The flexible shaft insures full flat contact with floors—prevents over-strain on furniture legs—eliminates tearing of rugs or linoleum . . .

NOISELESS—Even on Stone Floors

Send for Samples

BUCKEYE GLIDE CO., Inc. 117 E. 23rd St.
New York City



The NEW WITT CAN Gives Longer Service

. . . and here's why! The use of finest quality special analysis steel; the improved design of corrugation; and other WITT advantages add strength and rigidity.

In both the vertical and horizontal compression tests made on seven well-known makes of cans, at the Pittsburgh Testing Laboratory (illustrated above), the New WITT Can withstood the greatest pressure—definitely proving its superiority over the others.

Specify WITT—and enjoy the safety and economy of these better sanitary Cans. Write for booklet.

THE WITT CORNICE COMPANY, 2120 Winchell Ave., Cincinnati, O.

beth-Evans globe is in the finish of the rim opening. This formerly was a ground glass surface. It has been found that the grinding formed minute hair cracks, and the sharp corners left on the globe occasionally tended to cause chipping when the globe was placed in a clamp or held by rim screws. The globe rim is now being flame seared, and a continuous smooth glass surface covers the entire globe. With this unbroken skin of polished glass, there is less likelihood of chipped globe rims.

The scope of the ultraviolet lamp has been increased from its purely therapeutic use to include general illumination in specified rooms. The Holophane Ultraviolet Luminaire made by the Holophane Co., 342 Madison Avenue, New York City, has made possible this dual use of the S-2 Mazda Sunlight lamp. The lighting fixture is a regular reflector-refractor luminaire without the bottom cup, to which is added a reflector of aluminum oxide and a transformer that is housed in the canopy. The spacing and installation of this type of fixture are essentially the same as those used for ordinary lighting.

The opening in the bottom of the fixture allows the majority of ultraviolet rays to pass through without change, and the lateral rays that pass through the glass fixture are useful for the added illumination. A person remaining directly under the opening will obtain the minimum perceptible erythema in two hours, and ten hours' exposure will not cause a serious burning.

This type of light is not suggested for general classroom illumination, but has its application in special types of rooms where pupils are generally moving around in play or exercise. Greater results are naturally obtained where large parts of the body are exposed. This illumination may be used to advantage in kindergartens, special classrooms, locker rooms, swimming pools, gymnasiums and indoor playing courts.

Soundproofing the "Talkie" Projector for the Classroom

Gradually the manufacturers of portable motion picture machines are eliminating the objectionable features of "talking movies" for the classroom. The 16 mm. projector is not noisy but it does distract attention from the lecture and picture, and any machine in action has a certain amount of interest for adults as well as for children.

The Victor Animatograph Corporation, Davenport, Iowa, is now enclosing the Animatophone Talking Projector in a "Blimp" case that completely shrouds the machine during projection,

and forms a carrying case for transporting the machine. The case is asbestos lined, and the equipment has been passed by the National Board of Underwriters. This type of projector should be especially applicable to classroom use because there is little mechanical distraction, and the noise of projection is minimized.

Enclosing the projector has not eliminated any

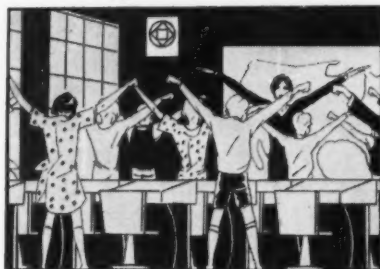


of the features that are used in the open model. Another change has been made, however, which, it is believed, improves the sound pick-up and reproduction and which has a mechanical advantage in the adjustment of the tone arm. The tone arm proper is pivoted from the top of the rocker arm. As the needle is advanced by the record groove, the tilting of the rocker arm compensates for the lateral movement of the pick-up head and keeps the needle on a straight line across the record. The pendulum principle employed in the pick-up keeps the needle constantly at right angles to the line of travel. It is said that this keeps the needle always parallel to the record groove and riding in the original recording track, with the result that reproduction is more natural and perfect, and wear on the record is reduced.

This new model is more compact, and the total weight of speaker and projector has been reduced to sixty-three pounds.

Modern Metal Windows and Their Advantages

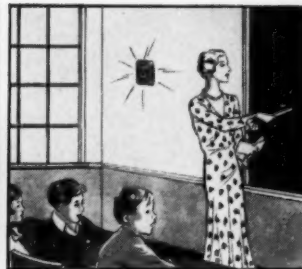
Modern school windows have had a specialized development that is based on providing a maximum amount of light, and on giving proper ventilation without unnecessary drafts. To answer these requirements, various kinds of pivoted sash that deflect incoming air towards the ceiling



Exercises to music—brought to every room by Public Address.



Modern Balanced Lighting makes studies easier.



Electric buzzers and signals promote school efficiency.



The Interphone brings the whole school within arm's reach.

Electricity goes to school

Today, you'll find Electricity on the job in every part of a school, speeding up school work . . . guarding the health and comfort of pupils . . . increasing school efficiency. The number of uses for this valuable servant grows every day. ¶ For example, electrical signal systems and Interphones make the principal's office a "nerve center" for instant communication to every part of a school. Electric buzzers start and end classes. Electric fire alarms protect lives. ¶ Thanks to clear-voiced Public Address and Radio Distribution System, words and music can be "wired" to every room . . . Modern Balanced Lighting protects young eyes from eye-strain . . . Electrical household appliances bring Domestic Science courses up to date . . . The Audiphone makes possible special classes for the Hard-of-Hearing. ¶ Graybar is proud of its function as supplier of the varied electrical products that are playing such an important part in schools everywhere. It is proud, too, that the quality of every one of its 60,000 electrical items is worthy of a quality reputation that goes back 62 years.

GraybaR

OFFICES IN 76 PRINCIPAL CITIES.
EXECUTIVE OFFICES: GRAYBAR BLDG., NEW YORK.



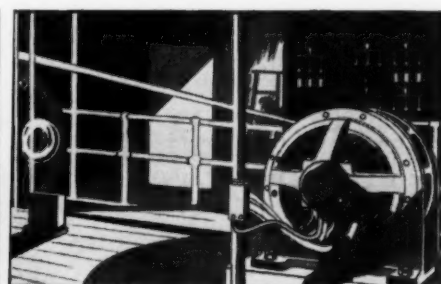
Electrical Appliances modernize Domestic Science.



Electric fire alarms safeguard children's lives.



Special Audiphone classes for the Hard-of-Hearing.



Graybar motors drive the ventilating fans that supply plenty of fresh air.

were developed. The first of these windows were made of wood. Later steel sash became economically practicable for general use. Other metals also have been developed for commercial use.

The Kawneer Company, Niles, Mich., is now making extruded bronze and aluminum alloy windows. The Sealair in-swinging window has been designed to accord with the principles of classroom lighting and ventilation. These Sealair windows are supplied with various combinations of sash to meet differing ventilation requirements. The type for general school use is supplied with in-swinging upper and lower sash, and a large central sash that is top hinged and held open by friction stays. The two lower sash have a handle control and the upper sash has a catch and strike that are operated with a window pole. In other models the larger central section may be divided into a pair of casement sash. Another possible combination is a horizontal sash window composed of two stationary and three movable sash.

Sash Design Is Variable

All of these sash may be glazed with a single light or divided for smaller units by muntins. This variety makes it possible to have a window treatment that is harmonious with the design of the building, whether that design is a historic or a modern style.

The construction of the frame is rigid and substantial, with all parts welded together to assure smooth and unbroken exposed surfaces. If extra large sash are required, sash members are increased in thickness to provide the necessary strength and rigidity. The window is weather-proofed with a three-point continuous contact, two of them resilient, while the third is a positive metal contact. Protection against rain coming in at the hinges is afforded by a continuous baffle, and weep holes have been provided to drain moisture to the outside.

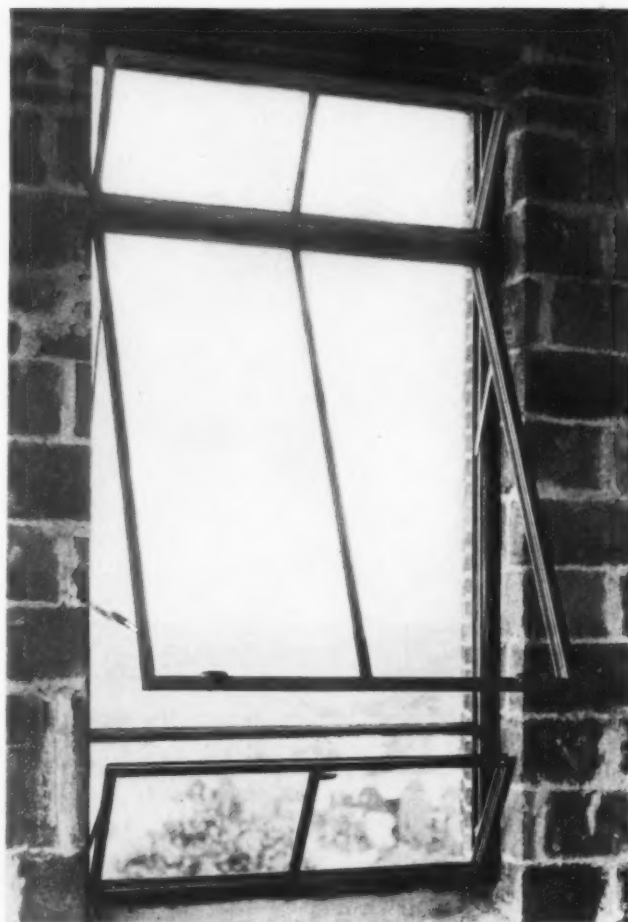
This window may be installed after the brickwork is completed, but before the building is plastered. Angle iron anchors that are either continuous or in short sections are secured to the wall and are used to hold the frame in place. The plaster return at the jamb and head of the window is stopped against the metal frame. In setting the frame it is well to have a maximum jamb return to prevent any possibility of the window's projecting beyond the wall into an aisle space. Where radiators or unit heaters are placed below the windows this is not a consideration.

Screens may be attached to the windows by a screen molding screwed to the frame.

Hardware is supplied for the use of a venetian blind or regular shade on the larger central sash.

The upper and lower sash may be glazed with any diffusing glass to break up the sunlight. To cover the opening completely with a shade it would have to be placed on the wall surface and not between the window jambs.

The bronze and aluminum alloys are protected with Kre to prevent immediate tarnishing. Since these metals are noncorrosive there are no main-



tenance costs due to depreciation of the material. The metal may be kept in a polished condition with soap and water applied at the time the windows are cleaned. This cleaning may all be done from the interior.

Particular attention should be called to the aluminum alloy window because there is an increasing use of white metal in modern building. Aluminum, chromium and nickel-steel alloys have become economically and structurally possible for use in buildings. Their durability and beauty which have brought them into prominence, especially in commercial buildings, will also cause a more general use of these materials for various structures.

The modern material, the shape of the sash and the possibilities of grouping that these windows offer make a modern school design possible and almost inevitable.

CONTENTS

Volume VIII

DECEMBER, 1931

Number 6

COVER

University of Virginia
Etching by DONN SWANN

- Education in the Balance..... 21
BY M. V. O'SHEA, *Editor-in-Chief, The NATION'S SCHOOLS*
- Estimating the Value of High School Publications..... 25
BY R. D. RUSSELL, *Professor of Secondary Education, School of Education, University of Idaho*
- Are Adult Education Courses Purposefully Planned?..... 31
BY JOHN J. DYNES, *Department of Education, University of Wisconsin*
- An Unusual School in an Unusual Community..... 33
BY ARTHUR B. MOEHLMAN, *Professor of School Administration and Supervision, School of Education, University of Michigan*
- Simplicity and Compactness Feature the Architectural Plan..... 40
BY B. C. WETZEL & COMPANY, *Architects, Detroit*
- Radio School Days Begin for More Than 60,000,000 Pupils..... 43
BY WILLIAM C. BAGLEY, *New York City*
- What the School Can Do to Promote the Child's Welfare at Home 45
BY HENRY J. GIDEON, *Director, Bureau of Compulsory Education, Board of Public Education, Philadelphia, and MRS. HENRY J. GIDEON*
- What School Staffs Spend and Save..... 53
BY W. HARDIN HUGHES, *Director, Bureau of Administrative Investigation and Research, Pasadena City Schools, Pasadena, Calif.*
- The Business of Running a Modern School Lunchroom..... 60
BY HOWARD L. BRIGGS, *Director of Vocational Education, and CONSTANCE C. HART, Supervisor of Lunchrooms, Board of Education, Cleveland*
- Mapping Out a Small School Activities Program..... 65
BY HOMER H. HOWARD, *Rogers Clark Ballard Memorial School, Louisville, Ky.*
- Practical School Administration:
How Graphs Clarify Statistics for the Layman..... 74
BY PHILIP C. LOVEJOY, *Chicago*
- Your Everyday Problems:
The Report Card—Its Rôle in School Administration..... 82
BY JOHN GUY FOWLKES, *Professor of Education, University of Wisconsin*

(Continued on page 4)

Published on the fifteenth of each month by
THE NATION'S SCHOOLS PUBLISHING CO.

Member Audit Bureau of Circulations

President, OTHO F. BALL Secretary, STANLEY R. CLAGUE Treasurer, J. G. JARRETT

919 NORTH MICHIGAN, CHICAGO, ILLINOIS—Telephone, Superior 6402

NEW YORK OFFICE—515 Madison Avenue. Telephone, Plaza 3-6969

SUBSCRIPTION RATES—Domestic, \$2.00. Canada and Foreign, \$3.00. Single copies (current), 25c. Back copies, 50c.

Copyright, 1931, by THE MODERN HOSPITAL PUBLISHING CO., INC. Entered as second-class matter January 16, 1928, at the Post Office at Chicago, Ill., under the act of March 3, 1879.

Printed in U. S. A.

CONTENTS FOR DECEMBER, 1931

Your School—Its Construction and Equipment

BY CHESTER HART, B.Arch., *Chicago*

An Improved Flush Valve That Is Easily Regulated	98
An Unbreakable Inkwell That Lowers Replacement Costs	98
New Costumer Provides Economical Cloakroom Accommodations	100
Bubbler Fountains Adaptable to Narrow Corridors	100
Signal Lights for Organ Stops Simplify Music Instruction	102

EDITORIALS

Training Superintendents in Service	70
The Social Policy of the American Federation of Teachers	70
Should School Playgrounds Be Scrapped?	71
Academic Freedom for High School Teachers	72
Happy to Say—By William McAndrew	73
News of the Month	86
In the Educational Field	96

Articles appearing in The NATION'S SCHOOLS are indexed regularly in the cumulative Education Index

Check breakage and replacement costs
with this

new School Inkwell

- 1 A bonafide hard rubber product. Not to be confused with cheap composition.
- 2 Will not corrode or deteriorate. Not affected by acid in ink.
- 3 No glass bottle to break. Made of hard vulcanized rubber and brass, molded into one piece.
- 4 Brass hinged top opens all the way back, eliminating costly bending and breakage.
- 5 Noiseless—metal top will not flop back and forth.
- 6 Easy to install—no tools required. Two styles designed to fit majority of holes now in school desks. Many special sizes can also be supplied.
- 7 Easy to fill and clean without danger of breakage. Practically air-tight when closed.
- 8 Effectually checks breakage and replacement costs. Protects books, clothes, and floors. Saves money, time, and trouble.

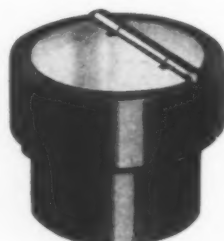
Write for complete information.

Sengbusch

Self-Closing Inkstand Co.
1221 Sengbusch Bldg. Milwaukee, Wis.



No. 48
Flange rests on
desk top



No. 49
Rest's flush with
desk top

BLACK BOARDS



CORK BULLETIN BOARDS

Oak finished frames or unframed—All Sizes: 18x24 inches and up

N.Y. SILICATE BOOK SLATE CO.
20 VESEY STREET NEW YORK CITY



"Thar's **GOLD** in them thar floors..."

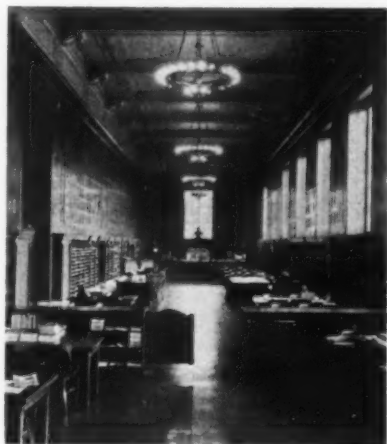
So speaks the modern "forty-niner". His piercing eye has caught the gleam of "pay dirt" on thousands of floors . . . he brings it to the surface by simply treating with Car-Na-Var.

Why not "prospect" for gold on *your* floors? By treating with Car-Na-Var you can cut your cleaning costs just about in half while doubling the life of your floors. For Car-Na-Var provides a sturdy protective film that resists the grinding-in of dirt and grime . . . a surface that is efficiently maintained by a simple

nightly sweeping and weekly polishing . . . instead of frequent scrubbing.

*Car-Na-Var is a scientific combination of varnish gum and waxes. It gives a beautiful, lustrous, yet non-slippery finish to wood, linoleum, terrazzo, concrete, and cork floors . . . protects the surface indefinitely from wear. Is far more durable and economical than other floor treatments. Comes in "natural" and popular colors. Readily applied with a mop. The coupon below will bring full details.

*For rubber floors use Rubber-Var, companion treatment to Car-Na-Var.



Car-Na-Var gives mirror-like finish to linoleum floors of Indianapolis Public Library. Now a simple nightly mopping keeps 50,000 square feet of battleship linoleum in excellent condition despite constant traffic.

Everyone interested in the efficient and economical maintenance of floors should have a copy of "Floor Research." Written by a nationally-known floor consultant. Send coupon for free copy.

CAR-NA-VAR
THE PERFECT FLOOR TREATMENT



This \$1 Book Free

CONTINENTAL CAR-NA-VAR CORPORATION
1821 National Ave., Brazil, Indiana
(Formerly Continental Chemical Corp., Watseka, Ill.)
Without obligation send me FREE copy of "Floor Research."
Also send me further details about Car-Na-Var and Rubber-Var and your FREE TEST offer.

Name

Address

By

"CUT THE OVERHEAD UNDER YOUR FEET"

Index of Advertisers

A

Alberene Stone Company.....	12
Ambassador Hotel	104
American Laundry Machinery Company.....	8
American Seating Company.....	93
Armstrong Cork Company (Floor Division) ..	11
Athey Company	85

B

Barrett Automatic Keyless Lock Co.....	93
Bell & Howell Co.	105
Brunswick-Balke-Collender Co.	91
Buckeye Blower Company.....	101
Buckeye Glide Co.	103

C

Carter Bloxonend Flooring Company.....	13
Celotex Company	91
Colgate-Palmolive-Peet Co.	97
Colt's Patent Fire Arms Mfg. Co.....	9
Columbia Mills, Inc.	104
Congoleum-Nairn, Inc.	4th cover
Continental Car-Na-Var Corporation.....	5
Crane Company	16

D

Deskor Chair Sales Corporation.....	2
Detroit-Leland Hotel	104
Dudley Lock Corporation.....	99
du Pont de Nemours & Co., Inc., E. I. (Tontine)	79

E

Electrical Research Products, Inc.....	14
Electric Storage Battery Company.....	89

F

Ford Company, J. B.	18
--------------------------	----

G

Gaylord Bros., Inc.	95
Graybar Electric Company.....	75
Gregg Publishing Company.....	95

H

Heywood-Wakefield Co.	20
Holmes Projector Company.....	99
Holtzer-Cabot Electric Company.....	93
Hynson, Westcott & Dunning, Inc.....	8

I

International Business Machines Corpora- tion	16
Interstate Shade Cloth Co.	93

J

Johnson & Son, S. C.	77
---------------------------	----

K

Kerner Incinerator Co.	17
Knight, Maurice A.	85

L

Lawlor Company, S. C.	97
----------------------------	----

M

Merriam Company, G. & C.....	95
Miller Keyless Lock Company, J. B.	97
Mills Company	87
Morgan Company	10

N

Nation's Schools Publishing Co.	104
National Theater Supply Company	83, 3rd cover
Nelson Corporation, Herman.....	1
N. Y. Silicate Book Slate Co.....	4

R

Rastetter & Sons, Inc., Louis.....	99
RCA Victor Company, Inc.	10
Richards-Wilcox Mfg. Co.....	2nd cover
Rixson Company, Oscar C.	12
Robbins Flooring Co.	85
Royal Metal Manufacturing Co.	95
Rundle-Spence Mfg. Co.	101

S

Samson Electric Co.	81
Sedgwick Machine Works.....	103
Sengbusch Self Closing Inkstand Company	4
Sloane-Blabon Corporation	7
Smith's Sons Co., John E.	17
Spencer Turbine Co.	106

T

Taylor Co., Halsey W.	97
Troy Laundry Machinery Co., Inc.	99
Twin City Scenic Company.....	101

U

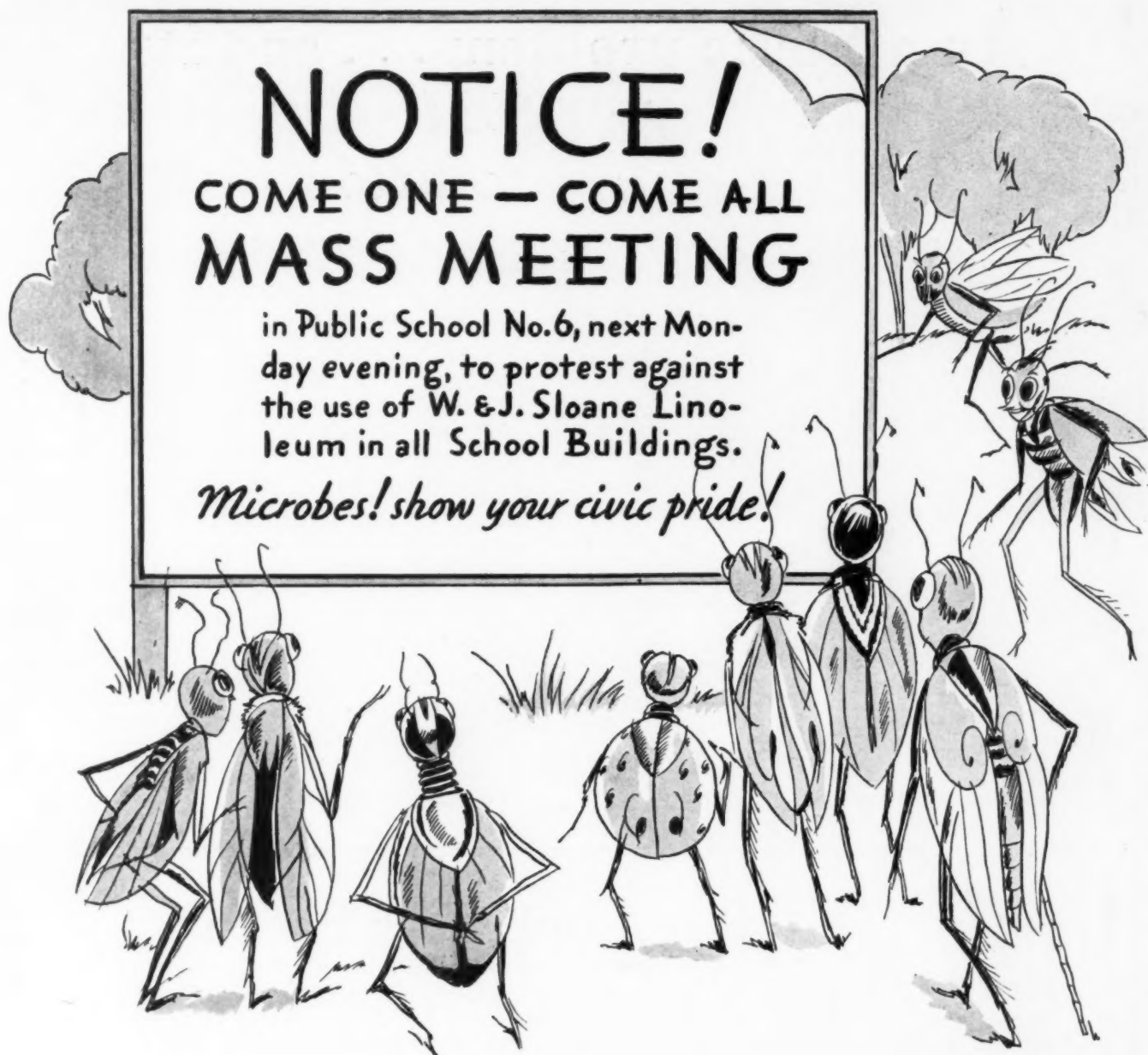
United Hotels	87
Utilatree Products, Inc.	83

V

Vallen Electrical Co., Inc.	103
Victor Animatograph Corporation.....	83
Vollrath Co.	103
Vonnegut Hardware Co.	15

W

Weber Costello Co.	101
Western Electric Co.	14, 75
Witt Cornice Company.....	91
Wooster Products, Inc.	91
Wright-DeCoster, Inc.	85



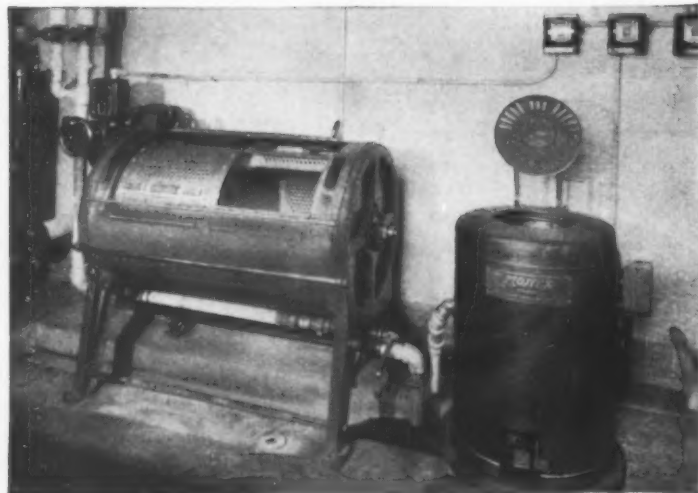
Some school-dwelling microbes have not yet learned that mass meetings and petitions are futile against the trend that is converting schools all over the country to W. & J. Sloane Linoleum. Naturally they resent having School Boards cover up cracks and crevices in the old-fashioned floors where they live. For how can a microbe endure linoleum that is double-waxed before it is laid, and in which extra grinding of ingredients, plus 32% extra pressure on the calender rolls insures a smooth, durable surface impervious to dirt—easy to keep spotlessly clean! Yes, it's tough on microbes, but certainly we shan't try to stem the current of W. & J. Sloane Linoleum specifications.



A free copy of this interesting book on Linoleum is yours for the asking. Address Advertising Department, W. & J. Sloane, 577 Fifth Avenue, New York.

W. & J. SLOANE LINOLEUM

An athletic problem . . . and its "All-American" solution



Here you see the compact laundry installation (American RAYTEX Washer, MONEX Extractor and DRYTE X Tumbler) which solved the problem of supplying clean, sanitary equipment to the athletic teams at the University of Detroit.

At the University of Detroit, they go in for sports in a big way. Baseball, basket-ball, track and field athletics. Two hundred men out for football, every year. And keeping those athletes supplied with clean, hygienic equipment — think what a problem that must be! But this University, with the cooperation of The American Laundry Machinery Company, has solved that problem once and for all — with a laundry of its own, right in its own Field House! And here's what R. L. Kiefer, Equipment Manager, says about this "All-American" department: "We gladly recommend to any university or college the installation of a modern plant such as we have . . . we consider this department a valuable asset in connection with our athletic activities."

If you have a problem pertaining to the hygiene of washable articles, it will pay you to talk with the "American" school-laundry Specialist. His services are at your disposal, without obligating you in any way.

THE **A**ERICAN LAUNDRY MACHINERY COMPANY
CINCINNATI, OHIO



An Applicator Bottle furnished with our compliments in your own medicine cabinet will soon convince you that **MERCUROCHROME—220 SOLUBLE**

(dibrom-oxymercuri-fluorescein)

IS THE

Logical Successor to Tincture of Iodine FOR

First Aid Prophylactic and General Antiseptic Use

Mercurochrome stains as Iodine does, and it is the stain of Mercurochrome, as it is of Iodine, that shows just where and how effectively the germicide has been applied; it fixes the bactericidal agent in the field for a relatively permanent period which prolongs the asepsis or the sterilizing effect, and it provides for demonstrable penetration into the tissues beneath the superficial surfaces. Inasmuch as Mercurochrome is definitely proved an extremely efficient general antiseptic, it is only reasonable to consider it the successor to Iodine in this field, as it is free from the objectionable features of Iodine, for

MERCUROCHROME DOES NOT IRRITATE, BURN OR INJURE TISSUE

SELL YOURSELVES FIRST

**HYNISON, WESTCOTT
& DUNNING, INC.**

BALTIMORE, MD.

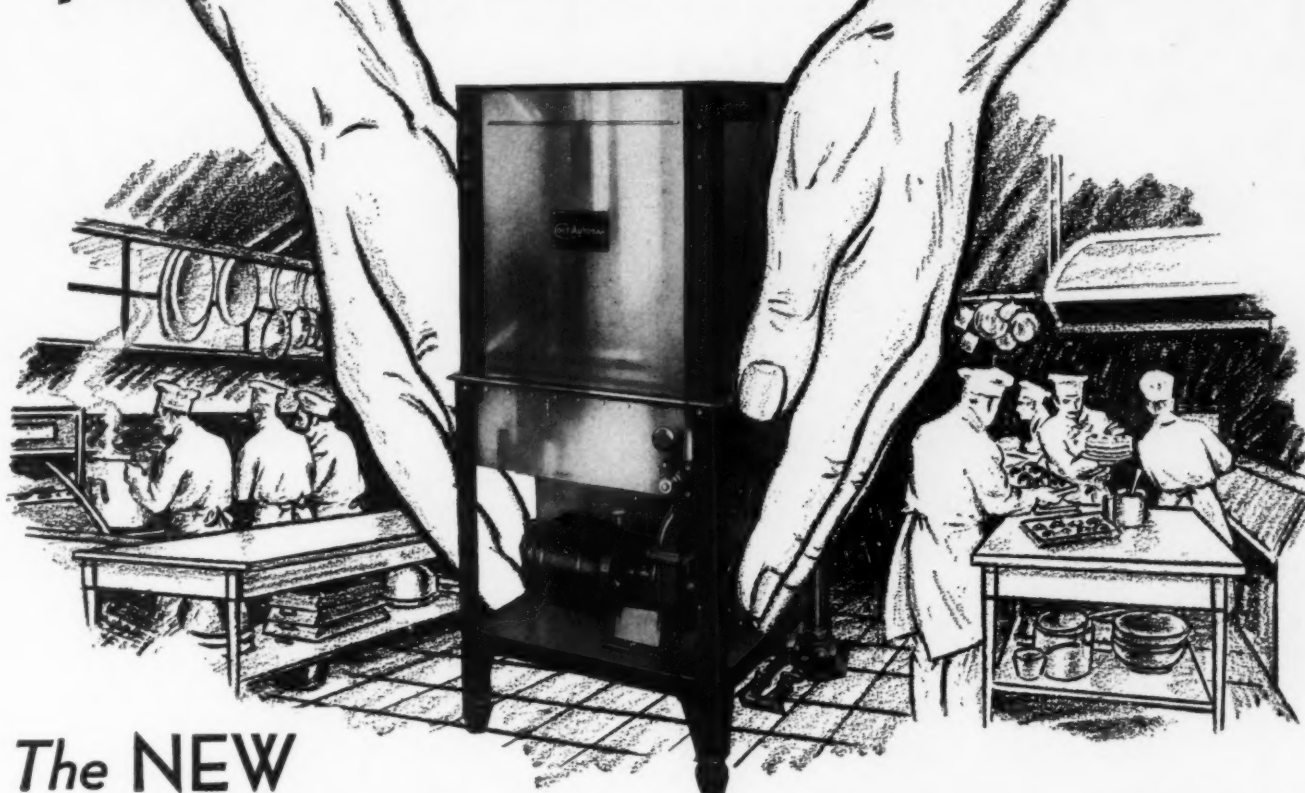
HYNISON, WESTCOTT & DUNNING, INC.
DEPT. N, BALTIMORE, MD.

Please send me Mercurochrome Applicator Bottle for personal use.

Name

Business Address

This Outstanding DISHWASHING MACHINE puts NEW EFFICIENCY in your kitchen



The NEW

COLT AUTOSAN Model "R-1"

SMALL IN SIZE — LOW IN PRICE — HIGH IN QUALITY and PERFORMANCE

HERE ARE TEN OF ITS FEATURES:

- | | | |
|--------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 Wash and rinse sprays controlled by single lever. | 5 Easy action—counterbalanced doors—for straightaway or corner installation. | 8 Powerful Colt Autosan direct action sprays. |
| 2 Top of machine free from moving parts and projections. | 6 Adjustable feet to compensate uneven floors. | 9 Quiet $\frac{3}{4}$ H. P. Motor—improved pump—both mounted on single pedestal base. |
| 3 Rugged construction. Compact design. Floor dimensions, 27 x 27 inches. | 7 Spray tubes hinged for quick, easy removal of scrap trays. | 10 Available in three metals—Galvanized Iron, Copper or Monel. |
| 4 Spray tubes removable without tools—large non-clogging openings. | | Rack size, 20 x 20 inches. |

MODEL "R-1"—the new Colt Autosan Rack Type Dishwashing Machine has everything that could be desired in a small dishwashing machine.

Sturdy, easily operated, fast, efficient, durable, compact, easily cleaned — yet it is the lowest priced dishwashing machine ever to bear the Colt Autosan name.

Where space counts and cost is important, where tableware must be safely and quickly made spotlessly clean, Model "R-1" is absolutely without peer.

For small Hospitals, Hotels, Clubs, Restaurants, Schools or as auxiliary equipment in large kitchens, Model "R-1" challenges comparison. Send for complete details and prices.



COLT'S PATENT FIRE ARMS MFG. CO.
AUTOSAN MACHINE DIVISION
HARTFORD, CONN., U.S.A.

How quickly they respond to School Radio



RADIO'S gripping appeal in school makes even dull wits sharper . . . rouses flagging interest in study. But be sure the reception facilities for your school are the *best science has devised* . . . RCA Victor Centralized Radio. This system is simple, troubleproof, designed for today and for the future by radio's most experienced engineers. It offers a choice of four broadcast programs for any or all schoolrooms . . . phonograph records . . . or microphone announcements. Yet its cost is moderate. RCA guarantees every installation. Discuss it with an RCA expert. He'll call and advise you if you write the RCA Victor office.

RCA Victor Centralized RADIO



Centralized Radio System

Centralized Radio Section
RCA Victor Company, Inc., Camden, N.J.
"RADIO HEADQUARTERS"

A Radio Corporation of America Subsidiary

Please send full illustrated data on RCA Centralized Radio. We understand that your field personnel is at our disposal without obligation.

Centralized Radio Section

F12

RCA Victor Company Inc., Camden, N. J.

Name

School

Address

When Teachers Have to Shout

*Don't Blame!
the Teachers!*

FLUSHWOOD (PATENTED)

Classroom quiet is imperative for effective instruction and teaching. No teacher can be expected to instruct properly when competing with the noise and din of busy hallways.

Distractions and disturbances, more than anything else, reduce the efficiency of both teacher and pupil. Modern school construction demands the silent study room—the quiet classroom. Anything that tends to interfere with the pupils' concentration on important lessons must be kept out.

Hence Flushwood, the new type door of sound resistant construction, built to fill this need completely and satisfactorily,

proven by actual tests to be much more sound resistant than any other type door, assures quiet and supplies beauty, sturdily constructed and with many other important features as well. You should investigate the advantages of Flushwood before settling definitely the door question for your school building.

A card to any of the offices listed below will bring complete information

Write for Catalog

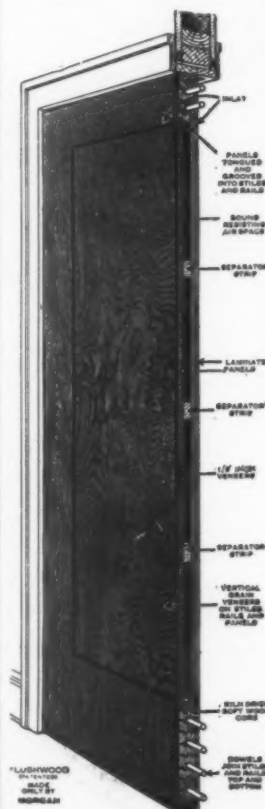
MORGAN WOODWORK ORGANIZATION

MORGAN COMPANY
Oshkosh, Wis. New York City
20 East 41st St.

MORGAN SASH AND DOOR COMPANY
Chicago

MORGAN MILLWORK COMPANY

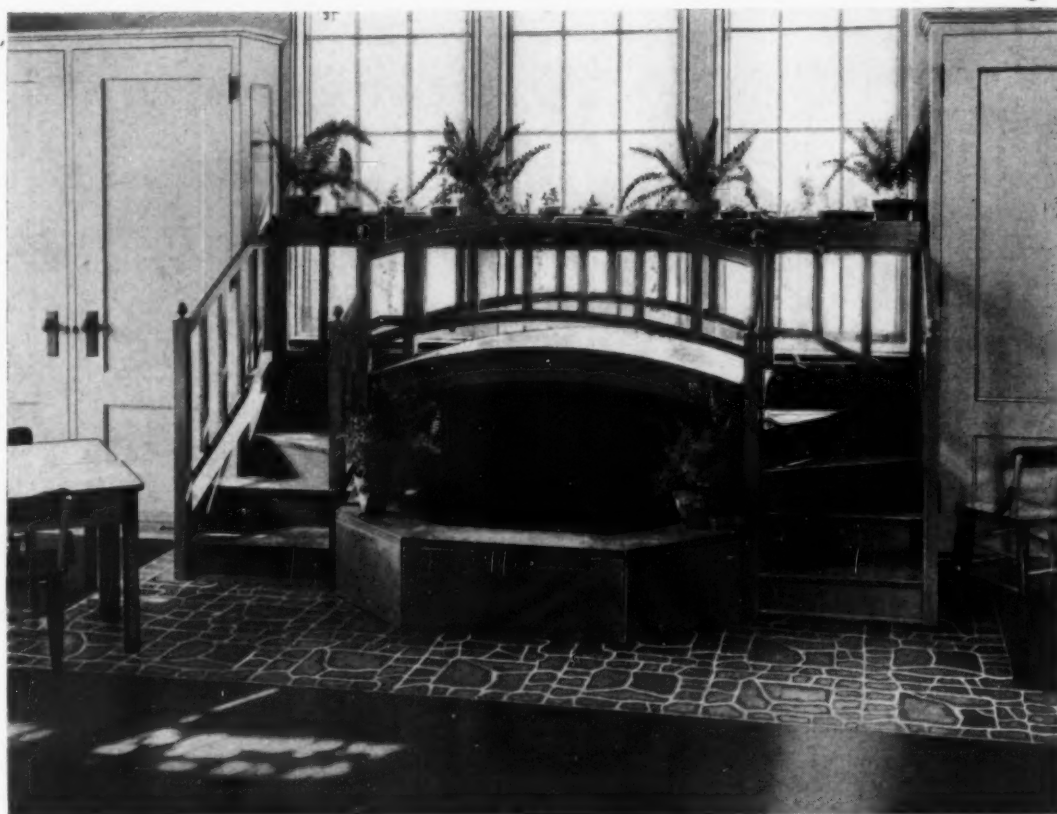
Baltimore Jersey City
Greensboro New Haven
Wilmington





Cinderella dances here

THE BLACK KNIGHT TILTS WITH THE RED
AND THEN SALADIN'S ARMIES MARCH
WITH HEAVY MEASURED TREAD . . .



Kindergarten room
in the Longfellow
School, Pontiac,
Michigan. The Lino-
leum is Armstrong's
Plain Green (No. 21)
and Embossed Inlaid
No. 6102.

*. . . yet scuffling feet will not mar the
bright cheerfulness of this Armstrong Floor*

MOTHER Goose herself could not have wished for a more practical floor than the one chosen for this kindergarten room of the Longfellow School, Pontiac, Michigan. Plain sea-green linoleum bordered with an Armstrong Inlaid in flagstone effect gives natural sprightliness to this room. This smooth, resilient floor is pleasant to walk on, non-slippery and easy-to-clean. Chalk dust, spilled things, and the tracked-in dirt of muddy days wipe right off the Accolac-Processed surface. Only an occasional waxing or lacquering is necessary to keep this floor permanently attractive and easy to clean.

In other schoolrooms, too, Armstrong's



Perhaps you would like a Knight
Linoleum (No. 2) set in your playroom
floor. There are several such designs
to choose from.

Linoleum quickly covers worn, splintery floors, silences clattering, scuffling feet. The cork and oxidized linseed oil composition of linoleum muffles footsteps and other sounds.

If you would like help in selecting the correct pattern just call upon our School Service Department. There is no charge for this service. And we'll be pleased to send you a copy of "Public Floors of Enduring Beauty," an interesting book on floor styles. Just simply write to the Armstrong Cork Company, Floor Division, Lancaster, Pennsylvania.

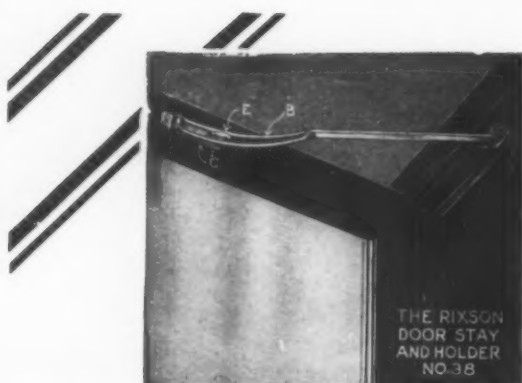
Armstrong's

Product

Armstrong's Linoleum Floors

for schools and colleges

PLAIN ~ INLAID ~ EMBOSSED ~ JASPE ~ PRINTED ~ LINOFLOR ~ ARMSTRONG'S QUAKER RUGS



Silent Sentinels

Rixson Door Stay and Holders tirelessly remain on the job: When required, they keep school doors open, but always they are on guard to prevent them from being thrown back on the hinges—from being ruthlessly banged against the brick reveals or door stop.

A sturdy curved spring arm prevents such shocks. A twist of a thumb-screw on No. 38 holds the door in an open position until released. In No. 39 the hold open feature is automatic.

A door man could not perform this duty so conscientiously. That is why school architects specify for school doors Rixson No. 38 or 39 Door Stay and Holder.

Full information is available to every Architect in Sweet's Catalog.

RIXSON No. 38 and 39 DOOR STAY & HOLDER

THE OSCAR C. RIXSON COMPANY
4450 Carroll Avenue Chicago, Ill.

New York Office: 101 Park Ave., N. Y. C.
Philadelphia Atlanta New Orleans Los Angeles Winnipeg



RIXSON

Builders' Hardware



Upkeep costs are negligible in a laboratory equipped with solid Alberene Stone table-tops, shelving, sinks, etc. Stain-proof, fire and flame proof, highly resistant to action of corrosive acids and fumes, Alberene Stone is also easy to clean.

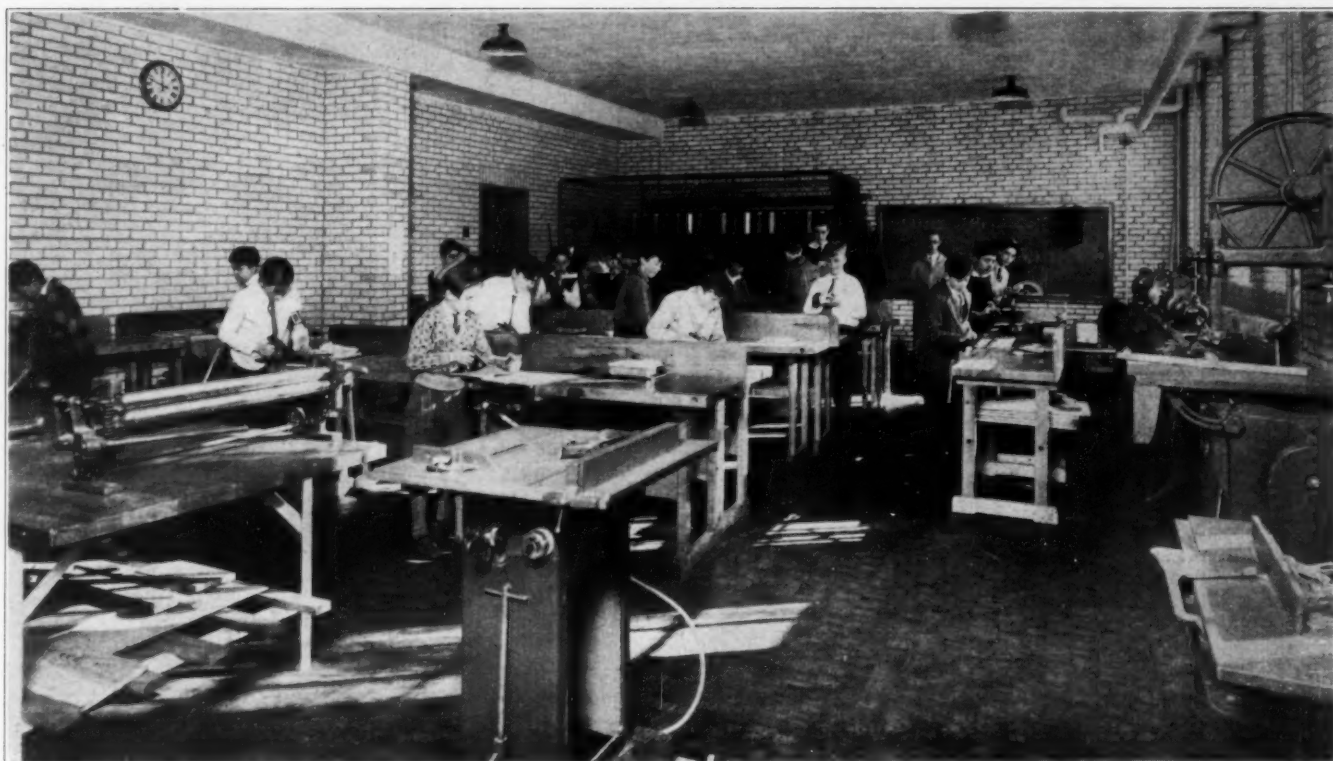
U. S. Appraisers' Stores used their Alberene fixtures for about twenty years then moved them to their new building. Bear that in mind when thinking of initial cost of equipment.

Technicians who have used Alberene in every important laboratory built in the past thirty years are the best witnesses to the durability of this stone for all laboratory working surfaces.

Alberene Stone Company, 153 West 23rd Street, New York. Branch Offices at Boston, Chicago, Philadelphia, Newark, N. J., Cleveland, Pittsburgh, Rochester, Washington, D. C., Richmond. Quarries and Mills at Schuyler, Virginia

ALBERENE STONE

Table Tops, Fume Hoods, Shelving, Sinks



*Wood working shops floored with Bloxonend. Daniel Webster Junior High School, Quincy, Mass.
Frank Irving Cooper Corp., Architects. Gymnasium also floored with Bloxonend.*

Floor Your Shop Rooms With **BLOX-ON-END**

Study the picture above. Note the tiled wall . . . natural light and air . . . a floor of BLOXONEND. This represents a typical shop room in schools designed by the Frank Irving Cooper Corp.—prominent Boston architects.

Students and instructors take added interest in vocational training in surroundings such as these. The restful floor of BLOXONEND eliminates leg weariness . . . it provides a surface that is bright and clean in appearance . . . a floor that can't splinter and is inherently non-slip. This floor stays smooth always and outlasts the average building.

Nearly all prominent school architects specify BLOXONEND for school shops and gymnasiums. It is the genuine strip block type. We will gladly send you a free descriptive booklet on request.

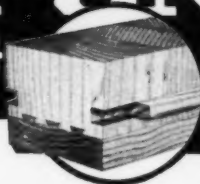
CARTER BLOXONEND FLOORING COMPANY

KANSAS CITY, MISSOURI

Branch Offices in Principal Cities

BLOX-ON-END

FLOORING



*Lay's Smooth
Stays Smooth*

Bloxonend is made of Southern Pine with the tough end grain up. It comes in 8 ft. lengths with the blocks dovetailed endwise onto baseboards.



*The teacher's vocation made
more interesting and effective . . . by*
TALKING PICTURES

Interest runs high, where professional educational talking pictures supplement the work of the teacher. And this interest grips teachers and pupils alike in the vivid effective sound film presentations offered by Electrical Research Products Inc.

Many are the fields served. There are units of instruction for teacher training, natural science, music appreciation, vocational guidance to mention just a few.

*Films are results of professional
group judgment*

Working with Electrical Research Products in making these talking



pictures are recognized educational leaders. All pictures are the result of professional group judgment.

To the specialized knowledge of these men is added another kind of

specialized knowledge—that of scenarists and directors experienced in talking picture production in the educational field.

*What Talking Pictures can do in
your classroom*

Besides bringing stimulating personalities of great teachers right into your classroom, talking pictures for music courses show "Close-ups"



of playing technique at the same time the tone quality of the instrument can be studied. In natural science films, time-lapse photography speeds up movements otherwise so slow as to be imperceptible to the human eye, as in the picture "Plant Growth."

*Western Electric Equipment for
every school use*

There is a Western Electric Sound

System to meet every school need for showings in the largest auditorium or the smallest classroom. The new 16 mm. equipment is ideal for individual classroom use. It is



set up in a few minutes, operated by the teacher, carried easily from room to room.

With Western Electric, you are sure of the same lifelike reproduction as Western Electric equipment is giving in 8000 theatres throughout the world.

A perfect combination

The professional educational talking pictures offered by Electrical Research Products and a Western Electric Sound System are a perfect combination. They intensify and vitalize instruction when used to supplement regular teaching methods.

ELECTRICAL RESEARCH PRODUCTS, INC. NS 12-31
250 West 57th Street, New York, N. Y.

Gentlemen—Please send me further information regarding educational talking pictures, and how I can use them.

NAME.....POSITION.....

ADDRESS.....

CITY.....STATE.....

Department of Educational Talking Pictures,
Electrical Research Products Inc.

Distributors of

Western Electric

EDUCATIONAL TALKING PICTURE EQUIPMENT

Von Duprin

REG. U. S. PAT. OFF.

Self-Releasing Fire and Panic Exit Latches

Sound Economy, Sir!

You can insist upon washroom fittings of the cheapest kind and nobody will be seriously harmed.

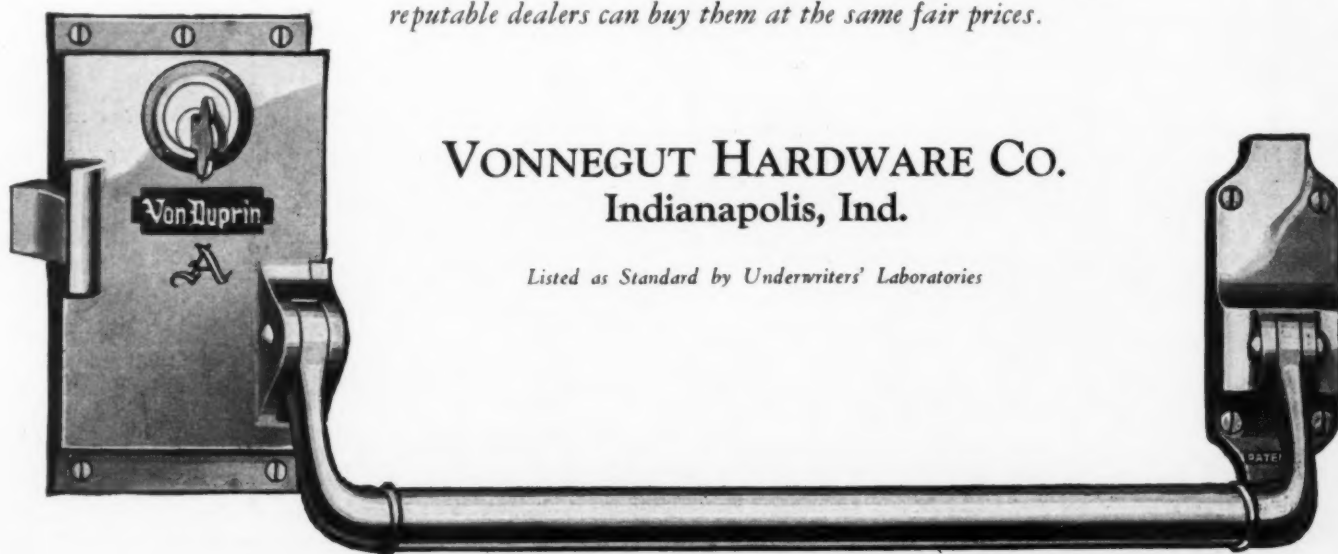
But the story is quite different when you demand that a few dollars be saved in the purchase of the panic devices.

Here, your saving not only costs money in the end, but it fails to bring the safety for the children occupying the building, the certainty of emergency operation, that Von Duprins would have assured.

Von Duprins are sure, safe, reliable, long wearing—and least costly in the end.

For economy's sake, have your architect specify them by name—and as a separate item from the finishing hardware. *Thus you foster clean competition, since all reputable dealers can buy them at the same fair prices.*

Catalog 28 V shows a Von Duprin device for every purse and every purpose. Or see Sweet's Pages C3892-C3896.

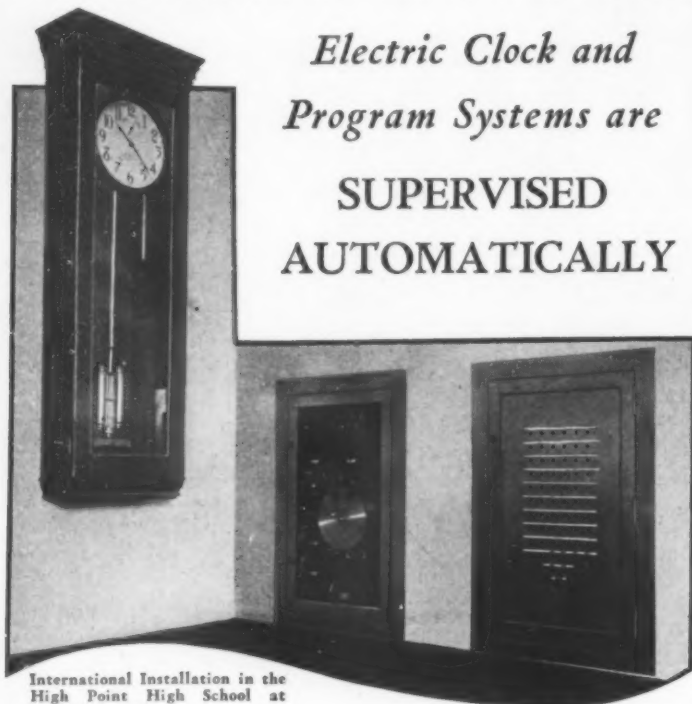


VONNEGUT HARDWARE CO.
Indianapolis, Ind.

Listed as Standard by Underwriters' Laboratories

INTERNATIONAL

*Electric Clock and
Program Systems are*
**SUPERVISED
AUTOMATICALLY**



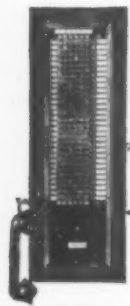
International Installation in the
High Point High School at
High Point, N. C.



CORRIDOR GONG



WALL CLOCK



CROSS
CONNECTING
BOARD

*. . . clocks and bells cannot
contradict each other . . .*

Automatic Supervision is the feature that makes International Time Control Systems unique. And that same feature makes these systems the only acceptable time equipment for modern schools.

All the clocks and bells in an entire building are kept under the constant control of one accurate time source. *They cannot contradict each other.*

School administration is thus relieved of those effort-wasting program maintenance routines which are otherwise unavoidable.

School Superintendents and Executives are respectfully invited to send for our interesting booklet "Time Control in the School". Clip the coupon below and your copy will be sent by return mail.

[The International representative in your vicinity will be glad to demonstrate this system. Drop him a card or phone him today. **]**

INTERNATIONAL BUSINESS MACHINES CORPORATION

International Time Recorders and Electric Time Systems
International Electric Tabulating and Accounting Machines
Dayton Moneyweight Scales and Store Equipment
International Industrial Scales

GENERAL OFFICES
270 Broadway
New York, N. Y.



Branch Offices and
Service Stations in
All Principal Cities

THE INTERNATIONAL TIME RECORDING CO.,
270 BROADWAY, NEW YORK, N. Y.

Please send me a copy of your booklet "Time Control in the School".

Name _____

School _____

City _____

State _____



Empire closet C 10930 with integral overflow
feature and Alpha water-controlled flush valve

At last a siphon-jet closet that won't overflow

Now Crane Co. offers its latest contribution to plumbing progress . . . a full siphon-jet closet which adds to the advantages of the best closets produced in recent years *a special patented feature which safeguards against clogging and overflow.*

Specifically this closet has:

An integral overflow which discharges directly into the outlet when the regular trap-way becomes clogged.

The downleg of the overflow is much larger in area than the inlet; enabling anything entering the inlet to pass the outlet.

The trap-way will pass a 2 3/8" diameter ball.

Full siphon-jet action.

A 3" water seal and 10" x 14" water surface are maintained at all times.

These features particularly recommend this closet for school building and modernizing. Like any Crane materials it can be purchased for modernizing purposes under the Crane Budget Plan, for only a few dollars down, the balance in small monthly sums.

CRANE

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK: 23 WEST 44TH STREET

Branches and Sales Offices in One Hundred and Ninety Cities

This modern school disposes of waste the modern way



THE Lake Shore High School of St. Clair Shores, Michigan, demanded a sanitary, low cost method of waste disposal. A Kernerator was installed. Recently, Mr. J. W. Fistler, Superintendent, wrote:

"The incinerator installed by your Mr. Taylor in 1928 has proven very satisfactory.

"We burn from forty to sixty bushels of paper and about a bushel of garbage daily.

"The incinerator has taken care of our needs in all ways and does not show any signs of wear and has not cost us anything in repairs or replacements.

"We can heartily recommend the incinerator to anyone."

Your school, too, needs the modern, sanitary method of waste disposal—incineration. The Kernerator may be installed in both new and existing school buildings.

Consult your architect and write for booklet "The School Problem of Waste Disposal Solved."

KERNER INCINERATOR COMPANY
3547 North Richards Street, Milwaukee, Wisconsin
Offices in over 150 cities



Lake Shore High School, St. Clair Shores, Michigan, Geo. J. Haas, Architect. H. M. Stemfels & Brown, Engineers, Kernerator equipped.

KERNERATOR

REG. U.S. PAT. OFF.
INCINERATION

The "BUFFALO" Food Chopper reduces food costs!



IN THE average kitchen, it takes two or three people several hours to prepare the day's chopped foods by hand or with a grinder. A tremendous waste of time and labor!

One man and a "BUFFALO" Chopper can prepare the same amount of food in one-tenth the time. Meats, fruits or vegetables are chopped to any degree of fineness, without mashing. The result is tastier, more nutritious, better quality dishes.

Leftovers can be utilized that are often thrown away, thus turning an ordinary loss into a profitable saving. These economies will pay for the chopper in a few months' time! It will pay you to install this profit-earning machine in your kitchen. Over 5000 are now in daily use. Write today for full particulars.

JOHN E. SMITH'S SONS CO.
50 BROADWAY BUFFALO, N. Y.

Patentees and Manufacturers of the

"BUFFALO" MEAT AND FOOD CHOPPER

Also manufacturers of the "BUFFALO" Bread Slicer
—a proven bread and labor saver!



CHRISTMAS GREETINGS

As another year draws to a close, we offer you our best wishes for the Christmas season and for the New Year. ❁ We are appreciative of your friendship and of the patronage you have given us. We pledge our best efforts to make Wyandotte Products and Wyandotte Service of even greater value to you. ❁ As the New Year advances, may it bring you an increasing measure of prosperity and happiness!



THE J. B. FORD CO.
WYANDOTTE MICHIGAN

The NATION'S SCHOOLS

Editor-in-Chief

PROF. M. V. O'SHEA, The University of Wisconsin

Executive Editor

MR. JOHN A. McNAMARA

CONSULTANT EDITORIAL BOARD

General Organization and Administration

HON. WILLIAM J. COOPER United States Commissioner of Education	PROF. JOHN GUY FOWLKES The University of Wisconsin	HON. FRANK PIERREPONT GRAVES Commissioner of Education, New York
SUPT. CHARLES S. MEEK Toledo	PROF. A. B. MOEHLMAN The University of Michigan	DEAN PAUL C. PACKER The University of Iowa
HON. PAYSON SMITH Commissioner of Education, Massachusetts	SUPT. J. W. STUDEBAKER Des Moines	SUPT. M. H. POTTER Milwaukee
SUPT. WILLIS A. SUTTON Atlanta	SUPT. CARLETON W. WASHBURNE Winnetka, Illinois	SUPT. PAUL C. STETSON Indianapolis
		DR. J. CAYCE MORRISON Department of Education, New York

Administration of Secondary Education

PROF. THOMAS H. BRIGGS Teachers College, Columbia University	MR. BENJAMIN COMFORT Principal, Cass Technical High School, Detroit	PROF. C. O. DAVIS The University of Michigan
DR. SAMUEL DRURY Headmaster, St. Paul's School	DR. WILSON FARRAND Newark Academy	GEN. LEIGH R. GIGNILLIAT Supt., Culver Military Academy
REV. JOSEPH GRADY Aquinas High School, Rochester, New York	PROF. ARTHUR J. JONES The University of Pennsylvania	MR. GEORGE M. WILEY Department of Education, New York
PROF. LEONARD V. KOOS The University of Chicago	PROF. L. M. PECHSTEIN The University of Cincinnati	SUPT. GEORGE H. SANBERG Rochester, Minnesota
		MR. ALFRED E. STEARNS Principal, Phillips Academy

Administration of Higher Education

PRESIDENT SAMUEL P. CAPEN The University of Buffalo	DEAN J. B. EDMONSON The University of Michigan	DEAN M. E. HAGGERTY The University of Minnesota
PRESIDENT P. W. HORN Texas Technological College	PRESIDENT JOHN J. TIGERT The University of Florida	PROF. BEN D. WOOD Teachers College, Columbia University

Administration of Rural Education

DEAN C. J. ANDERSON The University of Wisconsin	PROF. JULIAN E. BUTTERWORTH Cornell University	PROF. MABEL CARNEY Teachers College, Columbia University
MISS HELEN HEFFERNAN Department of Education, California	MR. JEROME HULL County Superintendent, Youngstown	MISS KATE V. WOFFORD President, Rural Education Dept., N. E. A.

Personnel Administration

SUPT. FRANK W. BALLOU Washington, D. C.	PROF. FREDERICK E. BOLTON The University of Washington	SUPT. W. W. BORDEN South Bend, Indiana
SUPT. A. R. CLIFTON Los Angeles	SUPT. THOMAS W. GOSLING Akron, Ohio	PRESIDENT CHARLES McKENNY State Teachers College, Ypsilanti, Mich.
DEAN LESTER B. ROGERS The University of Southern California	DEAN N. M. SALLEY Florida State College for Women	PROF. WILLIAM R. SMITHEY The University of Virginia

Curriculum Reconstruction

PROF. WILLIAM C. BAGLEY Teachers College, Columbia University	SUPT. R. W. BARDWELL Madison, Wisconsin	PROF. FRANKLIN W. BOBBITT The University of Chicago
PROF. BOYD H. BODE Ohio State University	SUPT. E. C. BROOME Philadelphia	SUPT. A. L. THRELKELD Denver
	PROF. WALTER D. COCKING George Peabody College	

Educational Finance and Business Management

PROF. PAUL R. MORT Teachers College, Columbia University	PROF. JOHN K. NORTON Teachers College, Columbia University	PROF. B. F. PITTINGER The University of Texas	PROF. R. B. THIEL Lawrence College
-------------------------------------------------------------	---------------------------------------------------------------	--------------------------------------------------	---------------------------------------

Educational Tests and Measurements

PROF. FRED C. AYER The University of Texas	SUPT. SAMUEL ENGLE BURR Glendale, Ohio	DR. STUART A. COURTIS The University of Michigan
DR. LETA HOLLINGWORTH Teachers College, Columbia University	PROF. G. M. RUCH The University of California	PROF. M. R. TRABUE The University of North Carolina

Educational Supervision

MISS ELIZABETH HALL Assistant Superintendent of Schools, Minneapolis	PROF. A. S. BARR The University of Wisconsin	MISS ELMA A. NEAL Assistant Superintendent of Schools, San Antonio
	PROF. GEORGE C. KYTE The University of California	

Vocational Guidance

PROF. A. H. EDGERTON The University of Wisconsin	PROF. HARRY DEXTER KITSON Teachers College, Columbia University	PRES. C. A. PROSSER Dunwoody Institute	SUPT. DAVID E. WEGLEIN Baltimore
-----------------------------------------------------	--------------------------------------------------------------------	-------------------------------------------	-------------------------------------

Public Relations and Public Affairs

SUPT. FRANK CODY Detroit	PHILIP C. LOVEJOY Chicago	DEAN W. L. UHL The University of Washington	SUPT. R. G. JONES Cleveland
-----------------------------	------------------------------	------------------------------------------------	--------------------------------

This Roomy, Compact Unit Saves Space, Money and Work



THIS practical desk will interest those educators who believe in compact, flexible, economical classroom seating. Because it combines desk and chair in one, this unit increases classroom capacity. It entails no expensive installation, is easily moved about for rearrangement of classes or for sweeping and cleaning. The top is purposely made of solid wood, instead of veneer, to prevent marring and chipping. Note how the standard which supports the desk shelf is curved out to permit more leg freedom and induce better posture. In every respect this Movable Chair Desk meets the most rigid requirements of modern classrooms. If desired, a roomy storage drawer, which fits under the seat, may be secured. Inkwells for the desk top are also available. Ask your nearest H-W Sales Office for detailed information on this and other modern school desks.

SALES OFFICES

Baltimore, Md.	New York, N. Y.
Boston, Mass.	Oklahoma City, Okla.
Buffalo, N. Y.	Philadelphia, Pa.
Chicago, Ill.	Pittsburgh, Pa.
Dallas, Texas	Portland, Oregon
Houston, Texas	San Antonio, Texas
Los Angeles, Calif.	San Francisco, Calif.
	Seattle, Wash.

HEYWOOD- WAKEFIELD